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2. Con	tract (Proc. Iı	nst. Ident) No.		ective Dat		4. Requisition/Purchase Request/Project No.				
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7. Nam	e And Addre	ss Of Contractor (No. Street, C	ity, County,	State, And	d Zip Code	e) 8.	3. Delivery	y		
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(X)	Section	Description Part I - The Schedule		Page(s)	(X)	Section Part II - (Contract	Description		Page(s)
X	A	Solicitation/Contract Form		1	X	I		act Clauses		33
Х	В	Supplies or Services and Price	es/Costs	3				Occuments, Exhibits, And O	ther Attachme	ents
Х	C	Description/Specs./Work State		11	Х	J		f Attachments		36
X	D	Packaging and Marking		24		Part IV -	Represen	ntations And Instructions		
Х	E	Inspection and Acceptance		25		K	Repre	sentations, Certifications, a	nd	T
Х	F	Deliveries or Performance		26			Other	Statements of Offerors		
Х	G	Contract Administration Data	1	28		L	Instrs	., Conds., and Notices to Off	lerors	
X	H	Special Contract Requiremen	ts	30		M	Evalu	ation Factors for Award		
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_		ervices set forth or otherwise id						S		
-		ation sheets for the consideration			hereby accepted as to the items listed above and on any continuation sheets. This award consummates the contract which consists of the following documents: (a)					
	•	gations of the parties to this con			the Government's solicitation and your offer, and (b) this award/contract. No					
subject to and governed by the following documents: (a) this					further co	ontractual d	locument	is necessary.		
award/contract, (b) the solicitation, if any, and (c) such provisions,										
representations, certifications, and specifications, as are attached										
or incorporated by reference herein. (Attachments are listed herein.)										
19A. Name And Title Of Signer (Type Or Print)						ne Of Contra		fficer		
						M. HOPFNE		IL (586)574-7070		
10R N	ame of Contr	actor	19c. Date S	Signed		ed States Of			20C. Date S	Signed
1/D, N	ame or Colli	actor	17c. Date S	ngneu	ZUD. UIII	ca Biaits O	America			_
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over guidance found on the TACOM contracting web page.

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Name of Offeror or Contractor: ACCURATE AUTOMATION CORPORATION

SECTION A - SUPPLEMENTAL INFORMATION

	Regulatory Cite	ulatory Cite Title	
A-1	52.204-4016 (TACOM)	TACOM-WARREN ELECTRONIC CONTRACTING	JUL/2003

- (a) TACOM is now operating in an electronic contracting environment. All TACOM solicitations and awards are now distributed on the TACOM Warren Business Opportunities web page (http://contracting.tacom.army.mil/opportunity.htm) and are no longer available in hard copy. The TDPs and other documents, when available electronically, will be an attachment or linked to the solicitation package on the web. Please see submission guidelines at http://contracting.tacom.army.mil/userguide.htm and http://contracting.tacom.army.mil/ebidnotice.htm for more information. Any requirements included in the solicitation take precedence
- (b) You may need to use special software to view documents that we post on the home page. This viewing software is freeware, available for download at no cost from commercial web sites like Microsoft and Adobe. In cases where such software is required, we provide a link from our page to the commercial site where the software is available. Once you arrive at the software developer's site, follow their instructions to download the free viewer. You then can return to the TACOM home page.
- (c) You are required to submit your offer, bid, or quote electronically. See the provision entitled "Electronic Offers (or 'Quotes' or 'Bids') Required in Response to This Solicitation (or 'Request for Quotations')" for more specific information.
- (d) Any award issued as a result of this solicitation will be distributed electronically. Awards posted on the TACOM Warren Business Opportunities web page represent complete OFFICIAL copies of contract awards and will include the awarded unit price. This is the notice required by Executive Order 12600 (June 23, 1987) of our intention to release unit prices in response to any request under the Freedom of Information Act (FOIA), 5 USC 552. Unit price is defined as the contract price per unit or item purchased as it appears in Section B of the contract and is NOT referring to nor does it include Cost or Pricing data/information. If you object to such release, and you intend on submitting an offer, notify the PCO in writing prior to the closing date identified in this solicitation and include the rationale for your objection consistent with the provisions of FOIA. A release determination will be made based on rationale given.
- (e) If you have questions or need help in using the Acquisition Center Home Page, call our Electronic Contracting Help Desk at (586) 574-7059, or send an email message to: acqcenweb@tacom.army.mil
- (f) If you have questions about the content of any specific item posted on our home page, please call the buyer or point of contact listed for the item. Additional help is available to small businesses from Government-funded Electronic Commerce Regional Centers (ECRCs) to implement EDI. Information on ECRC is available at http://www.ecrc.ctc.com

[End of Clause]

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ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
	SECTION B - SUPPLIES OR SERVICES AND PRICES/COSTS				
0001	SERVICES LINE ITEM				
	SECURITY CLASS: Unclassified				
	Contractor shall furnish all the supplies and services to accomplish the tasks specified in Section C, Scope of Work				
	(End of narrative B001)				
0001AA	SERVICES LINE ITEM				
	Noun: Supplies/Services in support of 1st Interim Report as set forth in Contract Data Requirements List (DD Form 1423) hereinafter referred to as Exhibit A.				
	(End of narrative B001)				
0001AB	SERVICES LINE ITEM	3	EA		\$1,000.00
	NOUN: DEV PLASMA-BASED MECHANISM PRON: E132C347EH PRON AMD: 01 ACRN: AA AMS CD: 622601C0511				
	Noun: Supplies/Services in support of 2nd Interim Report (Data Item A001) from DD Form 1423, See Exhibit A.				
	(End of narrative B001)				
	Inspection and Acceptance INSPECTION: Destination				
	Deliveries or Performance DLVR SCH PERF COMPL REL CD QUANTITY DATE 001 3 18-FEB-2004				
	\$ 1,000.00				
0002	DATA ITEM				
· · · -					

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ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
	SECURITY CLASS: Unclassified				
A001	DATA ITEM	3	EA	\$** NSP **	\$** NSP **
	SECURITY CLASS: Unclassified				
	Packaging and Marking				
	Inspection and Acceptance INSPECTION: Destination ACCEPTANCE: Destination				
	Deliveries or Performance DOC SUPPL REL CD MILSTRIP ADDR SIG CD MARK FOR TP CD 001 3 DEL REL CD QUANTITY DEL DATE 001 3 SEE SECTION F				
	FOB POINT: Destination				
	SHIP TO: PARCEL POST ADDRESS (Y00004) SHIP PARCEL POST CMDR U.S. ARMY TANK AUTOMOTIVE AND ARMAMENTS COMMAND 6501 EAST ELEVEN MILE RD WARREN, MI 48397-5000				
A002	DATA ITEM	3	EA	\$** NSP **	\$** NSP **
	SECURITY CLASS: Unclassified				
	Contractor's Final Scientific and Technical Report submitted within fourteen (14) days after receipt of Government approval.				
	(End of narrative B001)				
	Packaging and Marking				
	Inspection and Acceptance INSPECTION: Destination ACCEPTANCE: Destination				
	Deliveries or Performance DOC SUPPL REL CD MILSTRIP ADDR SIG CD MARK FOR TP CD				

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ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
	001 3 SEE SECTION F				
	FOB POINT: Destination				
	SHIP TO: PARCEL POST ADDRESS (Y00004) SHIP PARCEL POST CMDR U.S. ARMY TANK AUTOMOTIVE AND ARMAMENTS COMMAND 6501 EAST ELEVEN MILE RD WARREN, MI 48397-5000				
0003	SUPPLIES OR SERVICES AND PRICES/COSTS				
	SECURITY CLASS: Unclassified				
0003AA	Service Option				
	CLIN 003AA is an option which may be exercised unilaterally by the Government in accordance with the terms and conditions set forth in Sections C.4, the Section H Clause entitled "Exercise of Option", and Section F.3.1 Clause entitled "Period of Performance-Option".				
	Option 1 shall be in accordance with Paragraph C.4. If exercised by the Contracting Officer, the amount shall not exceed \$15,000.00				
	(End of narrative B001)				
	Inspection and Acceptance INSPECTION: Destination ACCEPTANCE: Destination				
	Deliveries or Performance				
0003AB	Service Option				
	NOUN: SERVICE OPTION				
	CLIN 0003AB is an option which may be exercised unilaterally by the Government in accordance with the terms and conditions set forth in Section C.5, the Section H Clause entitled "Exercise of Option," and the Section F.3.2 paragraph entitled "Period				

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ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
	of Performance of Performance-Option."				
	Option 2 shall be in accordance with Paragraph C.5. If exercised by the Contracting Officer, the amount shall not exceed \$10,000.00.				
	(End of narrative B001)				
	Inspection and Acceptance INSPECTION: Destination				
	Deliveries or Performance				
0003AC	Service Option				
	CLIN 0003AC is an option which may be exercised unilaterally by the Government in accordance with the terms and conditions set forth in Section C.6, the Section H Clause entitled "Exercise of Option," and the F.3.3 paragraph entitled "Period of Performance-Option".				
	Option 3 shall be in accordance with Paragraph C.6. If exercised by the Contracting Officer, the amount shall not exceed \$20,000.00.				
	(End of narrative B001)				
	Inspection and Acceptance INSPECTION: Destination				
	Deliveries or Performance				
0003AD	Service Option				
	CLIN 0003AD is an option which may be exercised unilaterally by the Government in accordance with the terms and conditions set forth in Section C.7, the Section H Clause entitled "Exercise of Option," and the Section F.3.4 paragraph entitled "Period of Performance-Option". Option 4 shall be in accordance with Paragraph C.7. If exercised by the Contracting Officer, the amount shall not exceed \$10,000.00				
	(End of narrative B001)				

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ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
	Inspection and Acceptance INSPECTION: Destination				
	Deliveries or Performance				
0003AE	Service Option				
	CLIN 0003AE is an option which may be exercised unilaterally by the Government in accordance with the terms and conditions set forth in Section C.8, the Section H Clause entitled "Exercise of Option," and the Section F.3.5 paragraph entitled "Period of Performance-Option".				
	Option 5 shall be in accordance with Paragraph C.8. If exercised by the Contracting Officer, the amount shall not exceed \$10,000.00				
	(End of narrative B001)				
	Inspection and Acceptance INSPECTION: Destination ACCEPTANCE: Destination				
	Deliveries or Performance				
0003AF	Service Option				
	CLIN 0003AF is an option which may be exercised unilaterally by the Government in accordance with the terms and conditions set forth in Section C.9, the Section H Clause entitled "Exercise of Option and the Section F.3.6 paragraph entitled "Period of Performance-Option".				
	Option 6 shall be in accordance with Paragraph C.9. If exercised by the Contracting Officer, the amount shall not exceed \$15,000.00				
	(End of narrative B001)				
	Inspection and Acceptance INSPECTION: Destination				
	Deliveries or Performance				

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ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0003AG	Service Option				
	CLIN 0003AG is an option which may be exercised				
	unilaterally by the Government in accordance with				
	the terms and conditions set forth in Section C.10, the Section H Clause entitled "Exercise of Option,"				
	and the Section F.3.7 paragraph entitled "Period of				
	Performance-Option".				
	Option 7 shall be in accordance with Paragraph C.10. If exercised by the Contracting Officer, the amount				
	shall not exceed \$32,128.00				
	(End of narrative B001)				
	Inspection and Acceptance				
	INSPECTION: Destination ACCEPTANCE: Destination				
	Deliveries or Performance				
0000777					
0003AH	Service Option				
	CLIN 0003AH is an option which may be exercised unilaterally by the Government in accordance with				
	the terms and conditions set forth in Section C.11,				
	the Section H Clause entitled "Exercise of Option," and the Section F.3.8 paragraph entitled "Period of				
	Performance-Option".				
	Option 8 shall be in accordance with Paragraph C.11.				
	If exercised by the Contracting Officer, the amount shall not exceed \$32,128.00				
	(End of narrative B001)				
	Inspection and Acceptance INSPECTION: Destination				
	Deliveries or Performance				
UAE000	Service Option				

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TEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
	CLIN 0003AJ is an option which may be exercised unilaterally by the Government in accordance with the terms and conditions set forth in Section C.12, the Section H Clause entitled "Exercise of Option," and the Section F.3.9 paragraph entitled "Period of Performance-Option".				
	Option 9 shall be in accordance with Paragraph C.12. If exercised by the Contracting Officer, the amount shall not exceed \$32,128.00				
	(End of narrative B001)				
	Inspection and Acceptance INSPECTION: Destination ACCEPTANCE: Destination				
	<u>Deliveries or Performance</u>				

CONTINUATION SHEET	Reference No. of Document Bei	Page 10 of 36	
CONTINUATION SHEET	PIIN/SIIN DAAE07-03-C-L104	MOD/AMD	

Name of Offeror or Contractor: ACCURATE AUTOMATION CORPORATION

3.1 <u>Basic (CLIN 0001)</u>

Payment is contingent upon TACOM receiving and approving a DD Form 250 for the designated report. The approved DD Form 250 will be sent by the contractor to the payment office, so the Contractor can be paid.

B.2 Option(s) (CLIN 0003)

If the Government exercises any or all of the options in paragraph H-10, then the payments under this contract for contractor performance of the option are to be in accordance with subCLIN(s) 0003AA, 0003AB, 0003AC, 0003AD, 0003AE, 0003AF, 0003AG, 0003AH and 0003AT

*** END OF NARRATIVE B 001 ***

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Name of Offeror or Contractor: ACCURATE AUTOMATION CORPORATION

SECTION C - DESCRIPTION/SPECIFICATIONS/WORK STATEMENT

	Regulatory Cite	Title	Date
C-1	52.239-4001	YEAR 2000 (Y2K) COMPLIANCE	MAY/1999
	(TACOM)		

- (a) In the event that this contract calls for the delivery of any data processing hardware, software and/or firmware (to be referred to as information technology), such deliverables shall be required to perform accurate date/time processing involving dates subsequent to December 31, 1999. The information technology shall be Year 2000 compliant upon delivery.
- (b) Definition. Year 2000 compliant means information technology that accurately processes date/time data (including, but not limited to, calculating, comparing, and sequencing) from, into, and between the twentieth and twenty-first centuries, and the years 1999 and 2000 and leap year calculations. Furthermore, Year 2000 compliant information technology, when used in combination with other information technology, shall accurately process date/time data if the other information technology properly exchanges date/time data with it.
 - (c) If this contract contains another provision requiring Y2K compliance, that provision shall take precedence.

(End of clause)

SECTION C

Scope of Work

- C.1. The Contractor, as an independent Contractor and not as an agent of the Government, shall:
 - (i) conduct a Proof of Principle Feasibility Experiment during the basic period of performance of this contract; and
- (ii) in the event the Contracting Officer exercises one or more of the options contained in Section H of this contract, then the Contractor shall perform the specified follow-on research and development Option(s) for a laser-triggered plasma-forming spark gap, as originally defined in Task 2 of the Contractor's Phase I SBIR proposal for Topic Number A02-224.
- C.2. Basic Task
- C.2.1. The Contractor shall perform a small-scale proof-of-principle experiment to demonstrate the feasibility of a laser-triggered spark gap for potential use in optical protection applications in combat vehicle vision devices. For this experiment, the Contractor shall use a low pressure test cell with ultra fine tungsten needle electrodes that are biased just below the critical breakdown voltage. By applying electromagnetic power in the visible range from a laser supply to the anode, the Contractor shall attempt to trigger the spark gap and cause plasma formation across the electrodes. Laser-triggered plasma formation in this manner shall be the criterion for a successful experiment. The Contractor shall also evaluate the experimental results for any evidence of the attenuation (absorption or reflection) of the incident laser light.
- C.2.2. Basic Task Deliverables
- C.2.2.1. The Contractor shall provide all data and reports specified in this section in accordance with the attached Contract Data Requirements List (CDRL), DD Form 1423.
- C.2.2.2. The Contractor shall submit a Scientific and Technical Report for review in accordance with DD Form 1423. This report shall describe in a scientific manner the purpose of the research effort and the methods used to accomplish the experiment, as well as a full description of the results obtained, and full details of the testing done and test results obtained, as well as the theory involved.
- C.2.2.3. The Report shall be prepared in Contractor format. The Draft Scientific and Technical Report shall be provided for Government COR review after completion of all technical activities in the Basic Task, but in no case later than forty-five (45) days after the Basic Task Start of Work Meeting. The Government will provide written review comments to the Contractor seven (7) days after receipt. The Contractor shall incorporate the review comments and furnish the Final Scientific and Technical Report to the Government within fourteen (14) days after receipt of comments. The Contractor shall provide the Draft Scientific and Technical Report and the Final Scientific and Technical Report to the Contracting Officer's Representative (COR) via mailed CD-ROM. The Contractor shall send emails to the COR, the Contract Specialist, and the Administrative Contracting Officer (ACO) to confirm that the CD-ROMs with the Draft and Final Scientific and Technical Reports have been mailed. These emails shall not contain technical information-only an acknowledgement that the CD-ROM has been sent. The Draft and the Final Scientific and Technical Reports must be readable by the Microsoft WORD for Office 97 program (Windows98). One (1) CD-ROM is required for the Draft Report and two (2) CD -ROMs are required for the Final Report.
- C.2.3. Basic Contract Meetings
- C.2.3.1. Basic Contract Start of Work Meeting

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Name of Offeror or Contractor: ACCURATE AUTOMATION CORPORATION

Within two weeks contract award, the Contractor shall conduct a Start of Work Meeting, to be done either over the phone, or via teleconferencing, for the purpose of discussing with the COR (and at the COR's election, other members of the Government's technical team) the Contractor's planned approach to accomplishing the work.

C.2.3.2. Basic Contract Meeting(s)/Demonstration(s)

Throughout the course of performance, the Contractor may invite the COR to its facility for the purpose of viewing tests or experiments, or discussing the progress of work. The Contractor is required to allow the COR to witness at least one experiment during the performance of this task.

C.2.3.3. Basic Contract Final Meeting.

Not later than sixty (60) days after the Basic Contract Start of Work meeting, the Contractor shall conduct a final meeting with the Government COR, via teleconferencing or telephone, for the purpose of summarizing the results obtained and the methods used to achieve the results.

C.2.4. Basic Contract Period of Performance

The Period of Performance for the Basic Contract shall be two (2) months from the Basic Contract Start of Work Meeting, to include one (1) month for the conduct of the technical work, with up to one (1) additional month permitted for the preparation, review, and revision of the Basic Scientific and Technical Report.

- C.3. In the event the Contracting Officer later exercises any of the options included in Section H of this contract, the Contractor will then perform additional tasks as specified in the option modification(s), representing one or more of the efforts described in paragraphs C.4 through C.12 below. The Government may exercise options in more than one increment, may exercise more than one option in a single increment, and may exercise some option tasks without exercising others, and may exercise options in an order different from the sequence of option tasks as listed below in C.4 through C.12.
- C.4. Option #1: Performance Analysis. In the event the Contracting Officer exercises the option for Option #1, the Contractor shall then perform work as follows.
- C.4.1. The Contractor shall perform a thorough Performance Analysis of the laser-triggered spark gap for optical system protection from lasers concept. As part of this Performance Analysis, the Contractor shall create a Performance Matrix containing all parameters necessary to evaluate the concept design. Some factors to be considered shall be, but shall not necessarily be limited to, the following:

At what wavelengths does the concept device respond?

What is the turn on power of the concept device?

What is the minimum turn on time for plasma formation in such a concept device?

What effects, if any, would this device have on the functioning of the overall vision system in which it would be integrated, both when the device is active and when it is inactive.

- Does the device have an upper limit for the optical (laser) input power it can handle, and if so, (i) what is that limit; and (ii) how does the device behave at input-power levels approaching and equaling and exceeding this limit?

 Does the ionization render the entire focal plane opaque, and if so what is the duration and extent of the opacity?
- Does the design require pre-ionization or biasing of the needles?
- C.4.2 During performance of this option, the Contractor shall identify any experiments that are necessary to verify or validate any assumptions in the performance analysis or that are necessary to investigate prior to the design of a hypothetical device.

These experiments shall be conceptually designed and described in the Final Scientific and Technical Report for this Option #1.

- C.4.3 The outcome of this Option #1 shall be a Final Scientific and Technical Report, containing a documented analysis of the expected performance of the concept device, which shall include a detailed explanation of the theoretical basis for these performance predictions. The expected performance of this concept device shall also be compared and contrasted with other known laser protection technologies.
- C.4.4. Option #1: Deliverables
- C.4.4.1. The Contractor shall provide all data and reports specified in this section in accordance with the attached Contract Data Requirements List (CDRL), DD Form 1423.
- C.4.4.2. The Contractor shall submit a Draft Scientific and Technical Report for COR review in accordance with DD Form 1423. This Report shall describe in a scientific manner the purpose of the research effort and the methods used to accomplish the tasks, as well as a full description of the results obtained, and full details of the analysis done and results obtained, as well as the theory involved.

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Name of Offeror or Contractor: ACCURATE AUTOMATION CORPORATION

The Report shall also detail the funding expended. The Report shall be prepared in Contractor format. The Draft Scientific and Technical Report shall be provided for Government review after completion of all technical activities in Option #1, but in no case later than sixty (60) days after the Option #1 Start of Work Meeting. The Government will provide written review comments to the Contractor seven (7) days after receipt. The Contractor shall incorporate the review comments and furnish the Final Scientific and Technical Report to the Government within fourteen (14) days after receipt of comments. The Contractor shall provide the Draft Scientific and Technical Report and the Final Scientific and Technical Report to the Contracting Officer's Representative (COR) via mailed CD-ROM. The Contractor shall send emails to the COR, the Contract Specialist, and the Administrative Contracting Officer (ACO) to confirm that the CD-ROMs with the Draft and Final Scientific and Technical Reports have been mailed. These emails shall not contain technical information-only an acknowledgement that the CD-ROM has been sent. The Draft and the Final Scientific and Technical Reports must be readable by the Microsoft WORD for Office 97 program (Windows98). One (1) CD-ROM is required for the Draft Report and two (2) CD-ROMS are required for the Final Scientific and Technical Report.

C.4.5. Option #1: Meetings

C.4.5.1. Option #1: Start of Work Meeting

Within two weeks of receiving a contract modification exercising Option #1 from the Contracting Officer, the Contractor shall conduct a Start of Work Meeting, to be done either over the phone, or via teleconferencing, for the purpose of discussing with the Government COR its planned approach to accomplishing the work.

C.4.5.2. Weekly Updates

The Contractor shall keep the COR abreast of progress and status via informal phone or email updates at least once every week.

C.4.5.3. Option #1: Final Meeting.

Not later than seventy-five (75) days after the Option #1 Start of Work meeting, the Contractor shall conduct a final meeting with Government personnel, via teleconferencing or telephone, for the purpose of summarizing the results obtained and the methods used to achieve the results.

C.4.6. Option #1: Period of Performance

The Period of Performance for Option #1 shall be up to seventy-five (75) days from the Option #1 Start of Work Meeting, to include forty-five (45) days for the conduct of the technical work, with up to thirty (30) additional days permitted for the Final Meeting for Option #1, and for preparation, review, and revision of the Option #1 Scientific and Technical Report.

- C.5. Option #2: Pre-design Refinement with Experiment. In the event the Contracting Officer exercises the option for Option #2, the Contractor shall then perform work as follows.
- C.5.1. A specific list of experiments shall be developed by the Contractor in consultation with the COR and approved by the COR for the purposes of verification or validation of the Performance Analysis, or for the purpose of accurately defining performance parameters, or otherwise resolving any remaining technical questions that require resolution before the Contractor can develop a detailed concept design.
- C.5.2. Option #2: Deliverables
- C.5.2.1. The Contractor shall provide all data and reports specified in this section in accordance with the attached Contract Data Requirements List (CDRL), DD Form 1423.
- C.5.2.2. The Contractor shall submit a Draft Scientific and Technical Report for COR review in accordance with DD Form 1423. This Report shall describe in a scientific manner the purpose of the research effort and the methods used to accomplish the tasks, as well as a full description of the results obtained, and full details of the experimental results, analyses, and conclusions, as well as the theory involved. The Report shall also detail the funding expended. The Report shall be prepared in Contractor format. The Draft Scientific and Technical Report shall be provided for Government review after completion of all technical activities in Option #2, but in no case later than forty-five (45) days after the Option #2 Start of Work Meeting. The Government will provide written review comments to the Contractor seven (7) days after receipt. The Contractor shall incorporate the review comments and furnish the Final Scientific Technical Report to the Government within fourteen (14) days after receipt of comments. The Contractor shall provide the Draft Scientific and Technical Report and the Final Scientific and Technical Report to the Contractor Shall provide the Oracle Contractor Shall send emails to the COR, the Contract Specialist, and the Administrative Contracting Officer (ACO) to confirm that the CD-ROMs with the Draft and Final Technical Reports have been mailed. These emails shall not contain technical information-only an acknowledgement that the CD-ROM has been sent. The Draft and the Final Technical Reports must be readable by the Microsoft WORD for Office 97 program (Windows98). One (1) CD-ROM is required for the Draft Scientific and Technical Report and two (2) CD-ROMs are required for the Final Scientific and Technical Report.

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C.5.3.1. Option #2: Start of Work Meeting

Within two weeks of receiving a contract modification exercising Option #2 from the Contracting Officer, the Contractor shall conduct a Start of Work meeting, to be done either over the phone, or via teleconferencing, for the purpose of discussing with the Government COR its planned approach to accomplishing the work.

C.5.3.2. Weekly Updates

The Contractor shall keep the COR abreast of progress and status via informal phone or email updates at least once every week.

C.5.3.3. Option #2: Final Meeting.

Not later than sixty (60) days after the Option #2 Start of Work meeting, the Contractor shall conduct a final meeting with the Government COR, via teleconferencing or telephone, for the purpose of summarizing the results obtained and the methods used to achieve the results

C.5.4. Option #2: Period of Performance

The Period of Performance for Option Task #2 shall be up to sixty (60) days from the Option #2 Start of Work Meeting, to include thirty (30) days for the conduct of the technical work, with up to thirty (30) additional days permitted for Final Meeting for Option #2, and for the preparation, review, and revision of the Option #2 Scientific and Technical Report.

- C.6. Option #3: Hypothetical Device Design (Basic). In the event the contracting officer exercises the option for Option #3, the Contractor shall then perform work as follows.
- C.6.1. The Contractor will design a hypothetical device which incorporates the laser-triggered spark-gap for optical protection from lasers concept into a vision system compatible with the visual requirements of combat vehicle surveillance vision systems. The design will implement all necessary functionality and incorporate lessons learned from any previous development of the theoretical model during the conduct of this contract and from the Performance Matrix, should Option #1 have been previously exercised.

A detailed description of the device operation will be developed, and a step by step explanation of all processes in the plasma formation and all operational principles and parameters will be discussed in a detailed Final Technical Report. Concept drawings (in Contractor format), which may be simply cartoon-type drawings illustrating the concept, shall be developed and included in the technical report. In the design, the spark gap (or gaps) shall be placed in the focal plane of the collecting lens, where the amplitude of the electric fields from the laser is greatest, to aid in plasma formation. If this results in opacity throughout the entire focal plane, even in areas where laser energy is not focused, then this is acceptable, if undesirable, in the Basic Hypothetical Design, because the Government places a higher priority on ensuring that harmful laser radiation is blocked than on transmitting low-level scene illumination during the actual irradiation event. The design shall have a quick recovery time, such that when the lasing event ceases, the transition time to the fully optical transmissive state shall be less than ten milliseconds

C.6.2. Option #3: Deliverables

- C.6.2.1. The Contractor shall provide all data and reports specified in this section in accordance with the attached Contract Data Requirements List (CDRL), DD Form 1423.
- C.6.2.2. The Contractor shall submit a Draft Scientific and Technical Report for COR review in accordance with DD Form 1423. This Report shall describe in a scientific manner the purpose of the research effort and the methods used to accomplish the tasks, as well as a the results obtained, and full details of the design and a step by step explanation of all processes in the plasma formation, plasmalight interaction, and all operational principles and parameters, including the theory involved. The Report shall also detail the funding expended. The report shall be prepared in Contractor format. The Draft Scientific and Technical Report shall be provided for Government review after completion of all technical activities in Option #3, but in no case later than seventy-five (75) days after the Option #3 Start of Work Meeting. The Government will provide written review comments to the Contractor seven (7) days after receipt. The Contractor shall incorporate the review comments and furnish the Final Scientific and Technical Report to the Government within fourteen (14) days after receipt of comments. The Contractor shall provide the Draft Scientific and Technical Report and the Final Scientific and Technical Report to the Contracting Officer's Representative (COR) via mailed CD-ROM. The Contractor shall send emails to the COR, the Contract Specialist, and the Administrative Contracting Officer (ACO) to confirm that the CD-ROMs with the Draft and Final Technical Reports have been mailed. These emails shall not contain technical information-only an acknowledgement that the CD-ROM has been sent. The Draft and the Final Scientific and Technical Reports must be readable by the Microsoft WORD for Office 97 program (Windows98). One (1) CD-ROM is required for the Draft Scientific and Technical Report.

C.6.3. Option #3: Meetings

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Within two weeks of receiving a contract modification exercising Option #3 from the Contracting Officer, the Contractor shall conduct a Start of Work Meeting, to be done either over the phone, or via teleconferencing, for the purpose of discussing with the COR its planned approach to accomplishing the work.

C.6.3.2. Weekly Updates

The Contractor shall keep the COR abreast of progress and status via informal phone or email updates at least once every week.

C.6.3.3. Option #3: Final Meeting.

Not later than ninety (90) days after the Option #3 Start of Work Meeting, the Contractor shall conduct a final meeting with Government personnel, via teleconferencing or telephone, for the purpose of summarizing the results obtained and the methods used to achieve the results.

C.6.4. Option #3: Period of Performance

The Period of Performance for Option #3 shall be up to ninety (90) days from the Option #3 Start of Work Meeting, to include sixty (60) days for the conduct of the technical work, with up to thirty (30) additional days permitted for the Final Meeting for Option #3, and for preparation, review, and revision of the Option #3 Scientific and Technical Report.

- C.7. Option #4: Localized Plasma Hypothetical Design with Experiment. In the event the Contracting Officer exercises the option for Option #4, the Contractor shall then perform work as follows.
- C.7.1. The Contractor shall design a hypothetical device to allow a look-through capability for the visual field even during irradiation by incoming laser energy, by designing a spark-gap grid that will allow localized plasma formation without causing the entire focal plane to become opaque and allowing simultaneous optical protection of laser-illuminated portion(s) of the focal plane and uninhibited transmission through sections of the focal plane upon which only low-energy scene illumination-not potentially dangerous laser illumination-is incident. The Contractor shall formulate experiments that it thinks will be necessary, consult with the COR to get COR comments and approval prior to conducting the experiments to establish proof-of-principle for this concept and obtain data that would be useful in developing or refining this concept.

C.7.2. Option #4 Deliverables

- C.7.2.1. The Contractor shall provide all data and reports specified in this section in accordance with the attached Contract Data Requirements List (CDRL), DD Form 1423.
- C.7.2.2. The Contractor shall submit a Draft Technical Report for COR review in accordance with DD Form 1423. This Report shall describe in a scientific manner the purpose of the research effort and the methods used to accomplish the tasks, as well as the results obtained (including test results), and full details of the design and a step by step explanation of all processes in the plasma formation, plasma-light interaction, and all operational principles and parameters, including the theory involved. The Report shall also detail the funding expended. The Report shall be prepared in Contractor format. The Draft Scientific and Technical Report shall be provided for Government review after completion of all technical activities in Option #4, but in no case later than forty-five (45) days after the Option #4 Start of Work Meeting. The Government will provide written review comments to the Contractor seven (7) days after receipt. The Contractor shall incorporate the review comments and furnish the final report to the Government within fourteen (14) days after receipt of comments. The Contractor shall provide the Draft Scientific and Technical Report and the Final Scientific and Technical Report to the Contracting Officer's Representative (COR) via mailed CD-ROM. The Contractor shall send emails to the COR, the Contract Specialist, and the Administrative Contracting Officer (ACO) to confirm that the CD-ROMs with the Draft and Final Scientific and Technical Reports have been mailed. These emails shall not contain technical information-only an acknowledgement that the CD-ROM has been sent. The Draft and the Final Scientific and Scientific and Technical Reports must be readable by the Microsoft WORD for Office 97 program (Windows98). One (1) CD-ROM is required for the Draft Scientific and Technical Report and two (2) CD-ROMs are required for the Final Scientific and Technical Report.

C.7.3. Option #4: Meetings

C.7.3.1. Option #4: Start of Work Meeting

Within two weeks of receiving a contract modification exercising Option #4 from the Contracting Officer, the Contractor shall conduct a Start of Work meeting, to be done either over the phone, or via teleconferencing, for the purpose of discussing with the COR its planned approach to accomplishing the work.

C.7.3.2. Weekly Updates

The Contractor shall keep the COR abreast of progress and status via informal phone or email updates at least once every week.

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C.7.3.3. Option #4: Final Meeting.

Not later than sixty (60) days after the Option #4 Start of Work Meeting, the Contractor shall conduct a final meeting with Government personnel, via teleconferencing or telephone, for the purpose of summarizing the results obtained and the methods used to achieve the results.

C.7.4. Option #4: Period of Performance

The Period of Performance for Option #4 shall be up to sixty (60) days from the Option #4 Start of Work Meeting, to include thirty (30) days for the conduct of the technical work, with up to thirty (30) additional days permitted to conduct the Final Meeting for Option #4, and for the preparation, review, and revision of the Option #4 Scientific and Technical Report.

- C.8. Option #5: Spark Gap Placement Away from Focal Plane with Experiment. In the event the Contracting Officer exercises the option for Option #5, the Contractor shall then perform work as follows.
- C.8.1. The Contractor shall design a hypothetical device to allow placement of the spark-gap (or gaps) away from the focal plane, or in an optical system with no focal plane at all. This may entail higher spark-gap biasing, since the magnitude of the electric field of the focused laser will be lower with increasing distance from the focal plane. The motivation for this design recommendation is that if the structures associated with the spark gap(s) are located in the focal plane, they can show up in the image, much like a reticle in a gunner's sight, whereas if they are located sufficiently outside of a focal plane, the spark gap structure would not form an image in the same plane as the image of the battlefield, and thus the battlefield image would not contain the spark gap structure. If no focal plane at all is required and effective optical protection can still be obtained by laser-triggered spark-gap plasma formation, then much simpler vision system designs can be implemented, at a considerable cost savings. The Contractor shall formulate experiments that it thinks will be necessary, consult with the COR to get COR comments and approval prior to conducting the experiments and obtain data that would be useful in developing or refining this concept.
- C.8.2. Option #5: Deliverables
- C.8.2.1. The Contractor shall provide all data and reports specified in this section in accordance with the attached Contract Data Requirements List (CDRL), DD Form 1423.
- C.8.2.2. The Contractor shall submit a Draft Scientific and Technical Report for COR review in accordance with DD Form 1423. This Report shall describe in a scientific manner the purpose of the research effort and the methods used to accomplish the tasks, as well as the results obtained (including test results), and full details of the design and a step by step explanation of all processes in the plasma formation, plasma-light interaction, and all operational principles and parameters, including the theory involved. The Report shall also detail the funding expended. The Report shall be prepared in Contractor format. The Draft Scientific and Technical Report shall be provided for Government review after completion of all technical activities in Option #5, but in no case later than forty-five (45) days after the Option #5 Start of Work Meeting. The Government will provide written review comments to the Contractor seven (7) days after receipt. The Contractor shall incorporate the review comments and furnish the Final Scientific and Technical Report to the Government within fourteen (14) days after receipt of comments. The Contractor shall provide the Draft Scientific and Technical Report and the Final Scientific and Technical Report to the Contractor shall send emails to the COR, the Contract Specialist, and the Administrative Contracting Officer (ACO) to confirm that the CD-ROMs with the Draft and Final Scientific and Technical Reports have been mailed. These emails shall not contain technical information-only an acknowledgement that the CD-ROM has been sent. The Draft and the Final Scientific and Technical Reports must be readable by the Microsoft WORD for Office 97 program (Windows98). One (1) CD-ROM is required for the Draft Scientific and Technical Report and two (2) CD-ROMs are required for the Final Scientific and Technical Report.
- C.8.3. Option #5: Meetings
- C.8.3.1. Option #5: Start of Work Meeting

Within two weeks of receiving a contract modification exercising Option #5 from the Contracting Officer, the Contractor shall conduct a Start of Work Meeting, to be done either over the phone, or via teleconferencing, for the purpose of discussing with the COR its planned approach to accomplishing the work.

C.8.3.2. Weekly Updates

The Contractor shall keep the COR abreast of progress and status via informal phone or email updates at least once every week.

C.8.3.3. Option #5: Final Meeting.

Not later than sixty (60) days after the Option #5 Start of Work Meeting, the Contractor shall conduct a final meeting with Government personnel, via teleconferencing or telephone, for the purpose of summarizing the results obtained and the methods used to achieve the results.

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C.8.4. Option #5: Period of Performance

The Period of Performance for Option #5 shall be up to sixty (60) days from the Option #5 Start of Work Meeting, to include thirty (30) days for the conduct of the technical work, with up to thirty (30) additional days permitted for the Final Meeting for Option #5, and for preparation, review, and revision of the Option #5 Scientific and Technical Report.

- C.9. Option #6: Device Design, Simulation, Manufacturing Investigations. In the event the Contracting Officer exercises the option for Option #6, the Contractor shall then perform work as follows.
- C.9.1. The Contractor shall develop a detailed prototype device design.
- C.9.1.2 The Contractor shall develop and deliver a three-dimensional (3D) CAD model of the prototype device(s). The Contractor shall develop and deliver Conceptual Design Drawings of the device(s). The Contractor shall use the 3D CAD model of the device(s) to conduct simulations in the Contractor's proprietary plasma-physics simulation software, MAGIC 3D. The modeling and simulation shall be used, at a minimum, to validate the theoretical analyses conducted in previous tasks and to define and narrow the range of future required experimentation. The Contractor shall summarize and deliver the output from this modeling and simulation, together with commentary and lessons learned, as part of the Final Technical Report. The Contractor shall design and document the experimental apparatus and formulate the design of experiments necessary to evaluate the performance of the spark gap implementation(s). The Contractor shall thoroughly document these efforts in the Final Technical Report. The Contractor shall investigate manufacturing techniques, including micro-encapsulated vacuum devices, miniature spark gap creation, lithographic techniques, voltage packaging, and integration into existing optical systems. The Contractor shall thoroughly document and summarize these manufacturing investigations, along with lessons learned and recommendations, in the Final Technical Report.
- C.9.2. Option #6: Deliverables
- C.9.2.1. The Contractor shall provide all data and reports specified in this section in accordance with the attached Contract Data Requirements List (CDRL), DD Form 1423.
- C.9.2.2. The Contractor shall submit a Draft Scientific and Technical Report for COR review in accordance with DD Form 1423. This Report shall describe in a scientific manner the purpose of the research effort and the methods used to accomplish the tasks, as well as the results obtained (including test results), and full details of the design and a step by step explanation of all processes in the plasma formation, plasma-light interaction, and all operational principles and parameters, including the theory involved. The Report shall also detail the modeling and simulation results, experimental apparatus design(s), the results of the manufacturing investigations, and the funding expended. The Report shall be prepared in Contractor format. The Draft Scientific and Technical Report shall be provided for Government review after completion of all technical activities in Option #6, but in no case later than sixty (60) days after the Option #6 Start of Work Meeting. The Government will provide written review comments to the Contractor seven (7) days after receipt. The Contractor shall incorporate the review comments and furnish the Final Scientific and Technical Report to the Government within fourteen (14) days after receipt of comments. The Contractor shall provide the Draft Scientific and Technical Report and the Final Scientific and Technical Report to the Contracting Officer's Representative (COR) via mailed CD-ROM. The Contractor shall send emails to the COR, the Contract Specialist, and the Administrative Contracting Officer (ACO) to confirm that the CD-ROMs with the Draft and Final Scientific and Technical Reports have been mailed. These emails shall not contain technical information-only an acknowledgement that the CD-ROM has been sent. The Draft and the Final Scientific and Technical Reports must be readable by the Microsoft WORD for Office 97 program (Windows98). One (1) CD-ROM is required for the Draft Scientific and Technical Report and four (4) CD-ROMs are required for the Final Scientific and Technical Report.

C.9.2.3. Drawings

The Contractor shall provide detailed Conceptual Design Drawings, as a part of and/or as an attachment to the Technical Report. (See C.9.2.2 above for due date.) The Contractor shall complete the drawing set in accordance with Data Item Description (DID) DI-SESS-81001B, "Conceptual Design Drawings." The Contracting Officer's Representative (COR) is responsible for accepting or rejecting the Conceptual Design Drawings. See data item description (DI-SESS-81001B), at the Internet address below, for instructions on how to complete the required drawings:

- http://assist.daps.dla.mil/docimages/0003/03/86/81001.PD2
- DI-SESS-81001B incorporates MIL-DTL-31000B by reference. You may down MIL-STD-31000B from the following Internet address: b. http://assist.daps.dla.mil/docimages/0003/02/30/31000B.PD3

The Contractor shall include the following Distribution Statement on all drawings: "Distribution authorized to U.S. Government Agencies only. Other requests shall be referred to: U.S. Army TARDEC, AMSTA-TR-R, MS-263, Emerging Technologies Team, 6501 E. 11 Mile Rd., Warren, MI 48397-5000." The drawings shall be prepared in the Contractor's format. The Contractor shall submit the drawings using one of the following electronic formats, listed in order of preference:

- The most recent version of Pro-ENGINEER (Pro-E) i.
- ii. IGES format
- iii. Other electronic formats. Before preparing your report in any other electronic format, please e-mail the COR, with an e-mail copy-furnished to amsta-idq@tacom.army.mil, in order to obtain a decision as to the format's acceptability.

This e-mail must be received by the COR not later than ten calendar days before the drawings' due date. All alternate methods must be a

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no cost to the Government.

Acceptable Media: The Contractor shall submit Conceptual Design drawings on 650 MegaByte CD-ROM, 100 or 250 MEGABYTE ZIP*-DISK, or 3 INCH Floppy Disk, accompanying the Technical Report on CD-ROM, via the US Postal Service or other carrier. The Contractor shall label and all submitted disks with the Contract number, the Contractor's name, address and a contact's phone number. An e-mail confirmation shall be sent to the COR, Contract Specialist, and ACO when the Conceptual Design drawings have been mailed. The Contractor shall identify the software application and version used to create each file submitted.

- * Registered Trademark
- C.9.3. Option #6: Meetings
- C.9.3.1. Option #6: Start of Work Meeting

Within two weeks of receiving a contract modification exercising Option #6 from the Contracting Officer, the Contractor shall conduct a Start of Work Meeting, to be done either over the phone, or via teleconferencing, for the purpose of discussing with Government personnel its planned approach to accomplishing the work.

C.9.3.2. Weekly Updates

The Contractor shall keep the COR abreast of progress and status via informal phone or email updates at least once every week.

C.9.3.3. Option #6: Final Meeting.

Not later than seventy-five (75) days after the Option #6 Start of Work Meeting, the Contractor shall conduct a final meeting with Government personnel, via teleconferencing or telephone, for the purpose of summarizing the results obtained and the methods used to achieve the results.

C.9.4. Option #6: Period of Performance

The Period of Performance for Option #6 shall be up to seventy-five (75) days from the Option #6 Start of Work Meeting, to include fortyfive (45) days for the conduct of the technical work, with up to thirty (30) additional days permitted for the Final Meeting for Option #6, and for preparation, review, and revision of the Option #6 Scientific and Technical Report.

- Option #7: Device Fabrication. In the event the Contracting Officer exercises the option for Option #7, the Contractor shall fabricate a prototype device in which the entire focal plane becomes opaque to block incoming laser radiation. The device fabricated shall be designed and built so as to (i) remain operational for a period of not less than 5 years; and (ii) be likely still to be operational for up to 10 years after delivery to the Government. Within 90 days after commencement of work on Option 7, the Contractor shall deliver to the COR--
 - (a) the prototype device itself;
- (b) any necessary spare or replacement parts that will be necessary to keep the prototype device functioning for a period of at least 5 years after delivery; and
- (c) a Final Scientific and Technical Report, as further described in C.10.2.2., which may include revised or additional drawings, if required per C.10.2.4
- C.10.1 The Contractor shall perform operation testing to verify and characterize the prototype device's performance. The tests conducted, and their results, will be provided in the Final Scientific and Technical Report.
- C.10.2. Option #7 Deliverables
- C.10.2.1. The Contractor shall provide all data and reports specified in this section in accordance with the attached Contract Data Requirements List (CDRL), DD Form 1423.
- C.10.2.2 The Contractor shall submit a Draft Scientific and Technical Report for review in accordance with DD Form 1423 and the Report shall contain any design and function addendum for any aspect of the design and function of the prototype device which may have been changed from, or added since, the previous submitted conceptual drawings or reports including. By way of example, but not limitation, any problems experienced during fabrication that required any modification to the process. The Report shall also contain a description any required maintenance or handling procedures that apply to this prototype device, and a description of its operating procedures.
- C.10.2.3 The Report shall include a description of the fabrication process, any required maintenance or handling procedures that apply to the prototype device or operating procedures. The Report shall also detail any design changes that became necessary due to fabrication considerations. In addition, the Report shall identify any consumable or degradable parts (e.g., if the "needle" electrodes will break down or become less effective over time or with usage), and provide a recommended replacement regimen regarding those replacement consumable and degradable components, which will be furnished by the Contractor with the prototype device per C.10 (b) above.

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C.10.2.3.1 The Report shall be prepared in Contractor format. The Draft Scientific and Technical Report shall be provided for COR review after completion of all technical activities in Option #7, but in no case later than one hundred (100) days after the Option #7 Start of Work Meeting. The Government will provide written review comments to the Contractor seven (7) days after receipt. The Contractor shall incorporate the review comments and furnish the Final Scientific and Technical Report to the Government within fourteen (14) days after receipt of comments. The Contractor shall provide the Draft Technical Report and the Final Technical Report to the Contract Officer's Representative (COR) via mailed CD-ROM. The Contractor shall send emails to the COR, the Contract Specialist, and the Administrative Contracting Officer (ACO) to confirm that the CD-ROMs with the Draft and Final Scientific and Technical Reports have been mailed. These emails shall not contain technical information-only an acknowledgement that the CD-ROM has been sent.

C.10.2.3.2 The Draft and the Final Scientific and Technical Reports must be readable by the Microsoft WORD for Office 97 program (Windows98). One (1) CD-ROM is required for the Draft Scientific and Technical Report and four (4) CD-ROMs are required for the Final Scientific and Technical Report. Each CD-ROM shall be permanently marked with this contract number, the Contractor's name, and a suitable identifying title and date.

C.10.2.4. Drawings

If the prototype device is fabricated according to the Design Drawings furnished in previous Options, no further drawing submission is necessary except to the extent, if any, to which fabrication of an actual prototype device involved (i) any deviations from the drawings furnished earlier; and/or (ii) any physical, functional, or interface characteristics not documented on the drawings furnished earlier. In the event that there is a design change in the prototype(s) between the Design Option Task and the prototype fabrication, the Contractor shall provide detailed "as-built" drawings as a part of and/or as an attachment to the Scientific and Technical Report, and shall clearly indicate in the Scientific and Technical Report which drawings furnished earlier during performance of this contract are superseded or replaced by the as-built drawings. (See C.10 above for due date.) The Contractor shall complete the drawing set in accordance with Data Item Description (DID) DI-SESS-81001B, "Conceptual Design Drawings." The Contracting Officer's Representative (COR) is responsible for accepting or rejecting the Conceptual Design Drawings. See data item description (DI-SESS-81001B), at the Internet address below, for instructions on how to complete the required drawings:

- a. http://assist.daps.dla.mil/docimages/0003/03/86/81001.PD2
- DI-SESS-81001B incorporates MIL-DTL-31000B by reference. You may download MIL-STD-31000B from the following Internet address:
 b. http://assist.daps.dla.mil/docimages/0003/02/30/31000B.PD3

The Contractor shall include the following Distribution Statement on all drawings:

"All designs, drawings and other data are the property of the U.S. Government. Requests for copies shall be referred to U.S. Army TARDEC, AMSTA-TR-R, MS-263, Emerging Technologies Team, 6501 E. 11 Mile Rd., Warren, MI 48397-5000"

The drawings shall be prepared in the Contractor's format. The Contractor shall submit the drawings using one of the following electronic formats, listed in order of preference:

- i. The most recent version of Pro-ENGINEER (Pro-E)
- ii. IGES format
- iii. Other electronic formats. Before preparing your report in any other electronic format, please e-mail the COR, with an e-mail copy-furnished to amsta-idq@tacom.army.mil, in order to obtain a decision as to the format's acceptability. This e-mail must be received by the COR not later than ten calendar days before the drawings' due date. All alternate methods must be a no cost to the Government

Acceptable Media: The Contractor shall submit Conceptual Design drawings on 650 MegaByte CD-ROM, 100 or 250 MegaByte ZIP*-DISK, or 3 INCH Floppy Disk, accompanying the Technical Report on CD-ROM, via the US Postal Service or other carrier. The Contractor shall label and all submitted disks with the Contract number, the Contractor's name, address and a contact's name and phone number. An e-mail confirmation shall be sent to the COR, Contract Specialist, and ACO when the Conceptual Design drawings have been mailed. The Contractor shall identify the software application and version used to create each file submitted.

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C.10.2.4. Prototype

The Contractor shall deliver the prototype device and any necessary spare or replacement parts that will be necessary to keep the prototype device functioning for a period of at least 5 years after delivery.

C.10.3. Option #7 Meetings

C.10.3.1. Option #7 Start of Work Meeting

Within two weeks of receiving a contract modification exercising Option #7 from the Contracting Officer, the Contractor shall conduct a Start of Work Meeting, to be done either over the phone, or via teleconferencing, for the purpose of discussing with Government personnel its planned approach to accomplishing the work.

C.10.3.2. Weekly Updates

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The Contractor shall keep the COR abreast of progress and status via informal phone or email updates at least once every week.

C.10.3.3. Option #7 Final Meeting.

Not later than one hundred twenty (120) days after the Option #7 Start of Work Meeting, the Contractor shall conduct a final meeting with Government personnel, via teleconferencing or telephone, for the purpose of summarizing the results obtained and the methods used to achieve the results.

C.10.4. Option #7 Period of Performance

The Period of Performance for Option #7 shall be up to one hundred twenty (120) days from the Option #7 Start of Work Meeting, to include ninety (90) days for the conduct of the technical work, with up to thirty (30) additional days permitted for the Final Meeting for Option #7, and for preparation, review, and revision of the Option #7 Scientific and Technical Report.

- C.11 Option #8: Device Fabrication. In the event the Contracting Officer exercises the option for Option #8, the Contractor shall fabricate a prototype device in which the focal plane is pixilated to allow only small local areas to be blocked, while allowing other portions of the focal plane to be transmitted. The prototype device shall be designed and built so as to (i) remain operational for a period of not less than 5 years; and (ii) be likely still to be operational for up to 10 years after delivery to the Government. Within 90 days after commencement of work on Option 8, the Contractor shall deliver to the COR--
 - (a) the prototype device itself;
- (b) any necessary spare or replacement parts that will be necessary to keep the prototype device functioning for a period of at least 5 years after delivery; and
- (c) a final Scientific and Technical report, as further described in C.11.2.2, which may include revised or additional drawings, if required per C.11.2.5
- C.11.1 The Contractor shall perform operation testing to verify and characterize the prototype device's performance. The tests conducted, and their results, will be provided in the Final Scientific and Technical Report.

C.11.2 Option #8 Deliverables

- C.11.2.1 The Contractor shall provide all data and reports specified in this section in accordance with the attached Control Data Requirements List, DD Forms 1423.
- C.11.2.2 The Contractor shall submit a Draft Scientific and Technical Report for review in accordance with DD Form 1423 and the Report shall contain any design and function addendum for any aspect of the design and function of the prototype device which may have been changed from, or added since, the previous submitted conceptual drawings or reports including, by way of example, but not limitation: any problems experienced during fabrication that required any modification to the process. The Report shall also contain a description any required maintenance or handling procedures that apply to this prototype device, and a description of its operating procedures.
- C.11.2.3 The Draft Scientific and Technical Report shall include a description of the fabrication process, any required maintenance or handling procedures that apply to the prototype device or operating procedures. The Report shall also detail any design changes that became necessary due to fabrication considerations. In addition, the report shall identify any consumable or degradable parts (e.g., if the "needle" electrodes will break down or become less effective over time or with usage), and provide a recommended replacement regimen regarding those replacement consumable and degradable components, which will be furnished by the Contractor with the prototype device per C.11 (b) above
- C.11.2.4 The Report shall be prepared in Contractor format. The Draft Scientific and Technical Report shall be provided for COR review after completion of all technical activities in Option #8, but in no case later than one hundred (100) days after the Option #8 Start of Work Meeting. The Government will provide written review comments to the Contractor seven (7) days after receipt. The Contractor shall incorporate the review comments and furnish the final report to the Government within fourteen (14) days after receipt of comments. The Contractor shall provide the Draft Scientific and Technical Report and the Final Scientific and Technical Report to the Contracting Officer's Representative (COR) via mailed CD-ROM. The Contractor shall send emails to the COR, the Contract Specialist, and the Administrative Contracting Officer (ACO) to confirm that the CD-ROMs with the Draft and Final Scientific and Technical Reports have been mailed. These emails shall not contain technical information-only an acknowledgement that the CD-ROM has been sent. The Draft and the Final Scientific and Technical Reports must be readable by the Microsoft WORD for Office 97 program (Windows98). One (1) CD-ROM is required for the Draft Report and four (4) CD-ROMs are required for the Final Report. Each CD-ROM shall be permanently marked with this contract number, the Contractor's name, and a suitable identifying title and date.

C.11.2.5 Drawings

If the prototype(s) is/are fabricated according to the Design Drawings furnished in previous Options, no further drawing submission is necessary except to the extent, if any, to which fabrication of an actual prototype device involved (i) any deviations from the drawings furnished earlier; and/or (ii) any physical, functional, or interface characteristics not documented on the drawings furnished earlier. In the event that there is a design change or undocumented feature or characteristic in the prototype(s) between the Design Option and the prototype fabrication, the Contractor shall provide detailed "as-built" drawings as a part of and/or as an attachment to the

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Scientific and Technical Report, and shall clearly indicate in the Option #8 Scientific and Technical Report which drawings furnished earlier during performance of this contract are superseded or replaced by the as-built drawings. (See C.11.2.4 for due date.) The Contractor shall complete the drawing set in accordance with Data Item Description (DID) DI-SESS-81001B, "Conceptual Design Drawings." The Contracting Officer's Representative (COR) is responsible for accepting or rejecting the Conceptual Design Drawings. See data item description (DI-SESS-81001B), at the Internet address below, for instructions on how to complete the required drawings:

http://assist.daps.dla.mil/docimages/0003/03/86/81001.PD2

DI-SESS-81001B incorporates MIL-DTL-31000B by reference. You may download MIL-STD-31000B from the following Internet address: d. http://assist.daps.dla.mil/docimages/0003/02/30/31000B.PD3

The Contractor shall include the following Distribution Statement on all drawings:

"All designs, drawings and other data are the property of the U.S. Government. Requests for copies shall be referred to U.S. Army TARDEC, AMSTA-TR-R, MS-263, Emerging Technologies Team, 6501 E. 11 Mile Rd., Warren, MI 48397-5000"

The drawings shall be prepared in the Contractor's format. The Contractor shall submit the drawings using one of the following electronic formats, listed in order of preference:

- i. The most recent version of Pro-ENGINEER (Pro-E)
- ii. IGES format
- iii. Other electronic formats. Before preparing your report in any other electronic format, please e-mail the COR, with an e-mail copy-furnished to amsta-idq@tacom.army.mil, in order to obtain a decision as to the format's acceptability. This e-mail must be received by the COR not later than ten calendar days before the drawings' due date.All alternate methods must be a no cost to the Government.

Acceptable Media: The Contractor shall submit Conceptual Design drawings on 650 MegaByte CD-ROM, 100 or 250 MegaByte ZIP*-DISK, or 3 INCH Floppy Disk, accompanying the Technical Report on CD-ROM, via the US Postal Service or other carrier. The Contractor shall label and all submitted disks with the Contract number, the Contractor's name, address and a contact's name and phone number. An e-mail confirmation shall be sent to the COR, Contract Specialist, and ACO when the Conceptual Design drawings have been mailed. The Contractor shall identify the software application and version used to create each file submitted.

" Registered Trademark.

C.11.2.6. Prototype(s)

The Contractor shall deliver the prototype device and any necessary spare or replacement parts that will be necessary to keep the prototype device operational for a period of at least 5 years after delivery of the prototype.

C.11.3. Option #8 Meetings

C.11.3.1. Option #8 Start of Work Meeting

Within two weeks of receiving a contract modification exercising Option #8 from the Contracting Officer, the Contractor shall conduct a Start of Work Meeting, to be done either over the phone, or via teleconferencing, for the purpose of discussing with Government personnel its planned approach to accomplishing the work.

C.11.4. Weekly Updates

The Contractor shall keep the COR abreast of progress and status via informal phone or email updates at least once every week.

C.11.5. Option #8 Final Meeting.

Not later than one hundred twenty (120) days after the Option #8 Start of Work Meeting, the Contractor shall conduct a final meeting with Government personnel, via teleconferencing or telephone, for the purpose of summarizing the results obtained and the methods used to achieve the results.

C.11.6. Option #8 Period of Performance

The Period of Performance for Option #8 shall be up to one hundred twenty (120) days from the Option #8 Start of Work Meeting, to include ninety (90) days for the conduct of the technical work, with up to thirty (30) additional days permitted for the Final Meeting for Option #8, and for preparation, review, and revision of the Option #8 Technical Report.

C.12. Option #9: Device Fabrication. In the event the Contracting Officer exercises the option for Option #9, the Contractor shall fabricate a device in which the spark gap(s) is/are either located significantly outside of the focal plane, or in an optical system which does not require a focal plane. The prototype device shall be designed and built so as to (i) remain operational for a period of

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not less than 5 years; and (ii) be likely still to be operational for up to 10 years after delivery to the Government. Within 90 days after commencement of work on Option 8, the Contractor shall deliver to the COR--

- (a) the prototype device itself;
- (b) any necessary spare or replacement parts that will be necessary to keep the prototype device functioning for a period of at least 5 years after delivery; and
- (c) a Final Scientific and Technical report, as further described in C.12.2.2, which may include revised or additional drawings, if required per C.12.2.5
- C.12.1 The Contractor shall perform operation testing to verify and characterize the prototype device's performance. The tests conducted, and their results, will be provided in the Final Scientific and Technical Report
- C.12.2 Option #9 Deliverables. The Contractor shall provide all data and reports specified in this section in accordance with the attached Contract Data Requirements List (CDRL), DD Form 1423.
- C.12.2.1 The Contractor shall provide all data and reports specified in this section in accordance with the attached Contract Data Requirements List (CDRL), DD Form 1423.
- C.12.2.2 The Contractor shall submit a Draft Scientific and Technical Report for COR review which report shall contain any design and function addendum for any aspect of the design and function of the prototype device which may have been changed from, or added since, the previous submitted conceptual drawings or reports including, by way of example, but not limitation: any problems experienced during fabrication that required any modification to the process. The Report shall also contain a description of any required maintenance or handling procedures that apply to this prototype device, and a description of its operating procedures.
- C.12.2.3 The Report shall include a description of the fabrication process, any required maintenance or handling procedures that apply to the prototype device or any operating procedures. The Report shall also detail any design changes that became necessary due to fabrication considerations. In addition, the Report shall identify any consumable or degradable parts in the prototype device, and provide a recommended replacement regimen regarding those replacement consumable and degradable components, which will be furnished by the Contractor with the prototype device per C.12 (b) above.
- C.12.2.4 The Report shall be prepared in Contractor format. The Draft Scientific and Technical Report shall be provided for COR review after completion of all technical activities in Option #9, but in no case later than one hundred (100) days after the Option #9 Start of Work Meeting. The Government will provide written review comments to the Contractor seven (7) days after receipt. The Contractor shall incorporate the review comments and furnish the Final Scientific and Technical Report to the Government within fourteen (14) days after receipt of comments. The Contractor shall provide the Draft Scientific and Technical Report and the Final Scientific and Technical Report to the Contracting Officer's Representative (COR) via mailed CD-ROM. The Contractor shall send emails to the COR, the Contract Specialist, and the Administrative Contracting Officer (ACO) to confirm that the CD-ROMs with the Draft and Final Scientific and Technical Reports have been mailed. These emails shall not contain technical information-only an acknowledgement that the CD-ROM has been sent. The Draft and the Final Scientific and Technical Reports must be readable by the Microsoft WORD for Office 97 program (Windows98). One (1) CD-ROM is required for the Draft Scientific and Technical Report and four (4) CD-ROMs are required for the Final Scientific and Technical Report. Each CD-ROM shall be permanently marked with this contract number, the Contractor's name, and a suitable identifying title and date.

C.12.2.5 Drawings

If the prototype(s) is/are fabricated according to the Design Drawings furnished in previous Options, no further drawing submission is necessary except to the extent, if any, to which fabrication of an actual prototype device involved (i) any deviations from the drawings furnished earlier; and/or (ii) any physical, functional, or interface characteristics not documented on the drawings furnished earlier. In the event that there is a design change or undocumented feature or characteristic in the prototype(s) between the Design Option Task and the prototype fabrication, the Contractor shall provide detailed "as-built" drawings as a part of and/or as an attachment to the Scientific and Technical Report, and shall clearly indicate in the Scientific and Technical Report which drawings furnished earlier during performance of this contract are superseded or replaced by the as-built drawings. This attachment shall be due with the submission of the Scientific and Technical Report. The Contractor shall complete the drawing set in accordance with Data Item Description (DID) DI-SESS-81001B, "Conceptual Design Drawings." The Contracting Officer's Representative (COR) is responsible for accepting or rejecting the Conceptual Design Drawings. See data item description (DI-SESS-81001B), at the Internet address below, for instructions on how to complete the required drawings:

http://assist.daps.dla.mil/docimages/0003/03/86/81001.PD2

DI-SESS-81001B incorporates MIL-DTL-31000B by reference. You may download MIL-STD-31000B from the following Internet address:
b. http://assist.daps.dla.mil/docimages/0003/02/30/31000B.PD3

The Contractor shall include the following Distribution Statement on all drawings:

"All designs, drawings and other data are the property of the U.S. Government. Requests shall be referred to U.S. Army TARDEC, AMSTA-TR-R, MS-263, Emerging Technologies Team, 6501 E. 11 Mile Rd., Warren, MI 48397-5000"

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The drawings shall be prepared in the Contractor's format. The Contractor shall submit the drawings using one of the following electronic formats, listed in order of preference:

- i. The most recent version of Pro-ENGINEER (Pro-E)
- ii. IGES format

iii. Other electronic formats. Before preparing your report in any other electronic format, please e-mail the COR, with an e-mail copy-furnished to amsta-idq@tacom.army.mil, in order to obtain a decision as to the format's acceptability. This e-mail must be received by the COR not later than ten calendar days before the drawings' due date. All alternate methods must be at no cost to the Government.

Acceptable Media: The Contractor shall submit Conceptual Design drawings on 650 MegaByte CD-ROM, 100 or 250 MegaByte ZIP*-DISK, or 3 INCH Floppy Disk, accompanying the Technical Report on CD-ROM, via the US Postal Service or other carrier. The Contractor shall label and all submitted disks with the Contract number, the Contractor's name, address and a contact's name and phone number. An e-mail confirmation shall be sent to the COR, Contract Specialist, and ACO when the Conceptual Design drawings have been mailed. The Contractor shall identify the software application and version used to create each file submitted.

"Registered Trademark.

C.12.2.6 Prototype

The Contractor shall deliver the prototype device and any necessary spare or replacement parts that will be necessary to keep the prototype device operational and functioning for a period of at least 5 years after delivery of the prototype.

- C.12.3. Option #9 Meetings
- C.12.3.1. Option #9 Start of Work Meeting

Within two weeks of receiving a contract modification exercising Option #9 from the Contracting Officer, the Contractor shall conduct a Start of Work Meeting, to be done either over the phone, or via teleconferencing, for the purpose of discussing with Government personnel its planned approach to accomplishing the work.

C.12.4. Weekly Updates

The Contractor shall keep the COR abreast of progress and status via informal phone or email updates at least once every week.

C.12.5. Option #9 Final Meeting.

Not later than one hundred twenty (120) days after the Option #9 Start of Work Meeting, the Contractor shall conduct a final meeting with Government personnel, via teleconferencing or telephone, for the purpose of summarizing the results obtained and the methods used to achieve the results.

C.12.6. Option #9 Period of Performance

The Period of Performance for Option #9 shall be up to one hundred twenty (120) days from the Option #9 Start of Work Meeting, to include ninety (90) days for the conduct of the technical work, with up to thirty (30) additional days permitted for the Final Meeting for Option #9, and for preparation, review, and revision of the Option #9 Scientific and Technical Report.

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Name of Offeror or Contractor: ACCURATE AUTOMATION CORPORATION

SECTION D - PACKAGING AND MARKING

D.1 Packaging

The contractor shall package all data delivered under this contract in accordance with standard commercial practice to ensure arrival at destination without damage or loss.

D.2 Marking

All technical data deliverable under this contract shall be identified by the contract number and the name of the prime contractor, to include, the name and address of the prime contractor and where applicable, the contract number and name and address of the subcontractor who generated the data.

D.3 Hardware

D.2.1 The contractor shall package any hardware (prototypes) delivered under this contract in accordance with standard commercial practice to ensure arrival at destination without damage or loss and shall be delivered FOB Destination to:

Commanding General

U.S. Army Tank-automotive and Armaments Command Shipping and Receiving Bldg. #203 ATTN: AMSTA-TR-R, MS 263/ Andrew Clements/x45389 6501 E. Eleven Mile Rd. Warren, MI 48397-5000

*** END OF NARRATIVE D 001 ***

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SECTION E - INSPECTION AND ACCEPTANCE

	Regulatory Cite	Title	Date
E-1	52.246-9	INSPECTION OF RESEARCH AND DEVELOPMENT (SHORT FORM)	APR/1984
E-2	52.246-4030 (TACOM)	INSPECTION POINT: DESTINATION	AUG/1994

We'll make our Procurement Quality Assurance inspection at the destination(s) listed in the Schedule. We'll be checking the supplies to make sure they conform with applicable drawings and specifications.

[End of Clause]

E-3 52.246-4031 ACCEPTANCE POINT: DESTINATION AUG/1994 (TACOM)

The Government will accept the supplies at the destination(s) listed in the Schedule.

[End of Clause]

- E.1 Inspection and acceptance or rejection of all data deliverable under this contract shall be made at Destination by the Contracting Officer or his duly authorized representative, the COR. The determination that the data are complete and conform to the requirements of the contract will be made by the Contracting Officer's Representative (COR), to ensure the work and the results thereof are in accordance with the terms of the contract.
- E.2 The Government reserves the right to witness any or all of the inspections, examinations, and tests performed under this contract.

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SECTION F - DELIVERIES OR PERFORMANCE

	Regulatory Cite	Title	Date
F-1	52.242-15	STOP WORK ORDER(ALTERNATE I dated APR 1984)	AUG/1989
F-2	52.247-34	F.O.B. DESTINATION	NOV/1991

F.1 <u>DATA</u>

F.1.1 The contractor shall submit all reports electronically in accordance with the Contract Data Requirements List CDRL) (DD Form 1423), Exhibit A, to the following address:

clementa@tacom.army.mil with a copy being sent to willistn@tacom.army.mil and to Dan.Rahm@dcma.mil

F.1.2 All data items required hereunder that cannot be submitted electronically by email, shall be delivered FOB Destination in accordance with DD Form 1423, Exhibit A,to the following address:

Commanding General

US Army Tank-automotive and Armaments Command ATTN: AMSTA-TR-R, MS 263, Andrew Clements 6501 East 11 Mile Rd. Warren, Michigan 48397-5000

- F.2 Period of Performance-Basic
- F.2.1 All work required under this basic contract, including the submission of the Final Scientific and Technical Report with completed SF 298, shall be completed within two (2) months after contract award.
- F.2.2 Acceptance of the Final Scientific and Technical will constitute completion of the basic contract.
- F.3 Period of Performance-Option(s)
- F.3.1 The period of performance for the first option period shall be two and one half (2.5) months, if the option is later exercised by the Contracting Officer. If the option is exercised prior to completion of the basic contract, the period of performance shall begin after completion of the second (2nd) month after basic contract award. If the option is exercised after completion of the basic contract, the period of performance shall be two and one half (2.5) months from the option award date.
- F.3.2 The period of performance for the second option shall be two (2) months, if the option is later exercised by the Contracting Officer.
- (a) If the second option is exercised prior to completion of either the basic contract or the first option in F.3.1, then the period of performance for the second option shall begin one day after the completion of the performance period of the basic or the preceding option.
- (b) If the second option is exercised after completion of performance of the basic contract or the first option, then the period of performance for the second option shall be two (2) months from option award date.
- F.3.3 The period of performance for the third option shall be three (3) months, if the option is later exercised by the Contracting Officer.
- (a) If the third option is exercised prior to completion of the either the first or second option in F.3.1 and F.3.2, then the period of performance for the third option shall begin one day after completion of the performance period of the preceding option(s).
- (b) If the third option is exercised after completion of the work on the either the first or the second option, then the period of performance for the third option shall be three (3) months from option award date.
- F.3.4 The period of performance for the fourth option shall be two (2) months, if the option is later exercised by the Contracting Officer
- (a) If the fourth option is exercised prior to completion of either the first, second or the third option in F.3.1, F.3.2 or F.3.3, then the period of performance for the fourth option shall begin one day after completion of the performance period of the preceding option(s).
- (b) If the fourth option is exercised after completion of the work on either the first or second or third option, then the period of performance for the fourth option shall be two (2) months from option award date.
- F.3.5 The period of performance for the fifth option shall be two (2) month, if the option is later exercised by the Contracting Officer.
- (a) If the fifth option is exercised prior to completion of the fourth option or any option in F.3.1,F.3.2, or F.3.3 then the period of performance for the fifth option shall begin one day after completion of the performance period of the preceding option(s).
 - (b) If the fifth option is exercised after completion of the work on either the first, second, third or fourth option, then the

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period of performance for the fifth option shall be two (2) months from option award date.

- F.3.6 The period of performance for the sixth option shall be two and one half (2.5) months, if the option is later exercised by the Contracting Officer.
- (a) If the sixth option is exercised prior to completion of the fifth option or any option in F.3.1, F.3.2, F.3.3 and F.3.4, then the period of performance for the seventh option shall begin one day after completion of the performance period of the preceding option(s).
- (b) If the sixth option is exercised after completion of the work on either the first, second, third, fourth or fifth option, then the period of performance for the sixth option shall be two and one half (2.5) months from option award date.
- F.3.7 The period of performance for the seventh option shall be four (4) months, if the option is later exercised by the Contracting Officer.
- (a) If the seventh option is exercised prior to completion of the sixth option or any option in F.3.1, F.3.2, F.3.3, F.3.4 and F.3.5, then the period of performance for the seventh option shall begin one day after completion of the performance period of the preceding option(s).
- (b) If the seventh option is exercised after completion of the work on either the first, second, third, fourth, fifth or sixth option, then the period of performance for the seventh option shall be four (4) months from option award date.
- F.3.8 The period of performance for the eighth option shall be four (4) months, if the option is later exercised by the Contracting Officer.
- (a) If the eighth option is exercised prior to completion of the seventh option or any option in F.3.1, F.3.2, F.3.3, F.3.4, F.3.5, and F.3.6, then the period of performance for the eighth option shall begin one day after completion of the performance period of the preceding option(s).
- (b) If the eighth option is exercised after completion of the work on either the first, second, third, fourth, fifth, sixth or seventh option, then the period of performance for the eighth option shall be four (4) months from option award date.
- F.3.9 The period of performance for the ninth option shall be four (4) months, if the option is later exercised by the Contracting Officer.
- (a) If the ninth option is exercised prior to completion of the eighth option or any option in F.3.1, F.3.2, F.3.3, F.3.4,F.3.5, F.3.6, and F.3.7, then the period of performance for the ninth option shall begin one day after completion of the performance period of the preceding option(s).
- (b) If the ninth option is exercised after completion of the work on either the first, second, third, fourth, fifth, sixth, seventh, or eighth option, then the period of performance for the ninth option shall be four (4) months from option award date.
- F.3.10 The contractor shall submit the Option Final Scientific and Technical Report within the two or two and one half months for Options with a period of performance of two (2) or (2.5) months and within three or 4 months (3 or 4) months when the option performance period is three or four (3 or 4) months. Acceptance of the Option Final Scientific and Technical Report will constitute competition of the contract.

*** END OF NARRATIVE F 001 ***

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SECTION G - CONTRACT ADMINISTRATION DATA

PRON/

LINE AMS CD/ ORDER OBLG ACCOUNTING OBLIGATED ITEM_ ACRN STAT ACCOUNTING CLASSIFICATION NUMBER STATION AMOUNT MIPR 0001AB E132C347EH 21 32040000036D7675P622601255Y S20113 32C347 W56HZV 1,000.00

622601C0511

TOTAL \$ 1,000.00

TOTAL \$ 1,000.00

Regulatory Cite _____ Title _____ Date

G-1 52.242-4016 (TACOM)

COMMUNICATIONS

MAY/2000

(a) Communications on technical matters pertaining to the contract shall be direct between the contractor and the Technical Representative. Communications for the Technical Representative shall be addressed to:

Name: Andrew Clements

US Army TACOM

ATTN: AMSTA-TR-R, MS 263 6501 East Eleven Mile Rd. Warren, MI 48397-5000 Phone: (586) 574-5389 Clementa@tacom.army.mil

(b) The Administrative Contracting Officer's (ACO) name, phone number and email address:

e-mail:

ACO: Dan Rahm

DCMA Atlanta

Phone: (423) 855-0254

e-mail: Dan.Rahm@dcma.mil

(c) Please see the appointment letters prepared at time of contract award for functions the Technical Representative and ACO will perform on this contract.

[End of Clause]

G-2 252.201-7000 CONTRACTING OFFICER'S REPRESENTATIVE

DEC/1991

- (a) <u>Definition</u>. <u>Contracting Officer's Representative</u> means an individual designated in accordance with subsection 201.602-2 of the Defense Federal Acquisition Regulation Supplement and authorized in writing by the contracting officer to perform specific technical or administrative functions.
- (b) If the Contracting Officer designates a contracting officer's representative (COR), the Contractor will receive a copy of the written designation. It will specify the extent of the COR's authority to act on behalf of the contracting officer. The COR is not authorized to make any commitments or changes that will affect price, quality, quantity, delivery, or any other term or condition of the contract.

[End of Clause]

G-3 52.232-4005 INVOICE INFORMATION REQUIREMENT

JAN/1988

(TACOM)

On each payment request submitted, the Contractor shall identify each affected Contract Line Item Number (CLIN), sub-CLIN, and/or work directive, together with the related dollar amounts. This requirement does not diminish or restrict any other requirement of this contract.

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	CONTINUATION SHEET	PHN/SHN DAAE07-03-C-L104 MOD/AMD	

Name of Offeror or Contractor: ACCURATE AUTOMATION CORPORATION

- G.1 (TACOM) SPECIAL PAYING INSTRUCTIONS: PAY OLDEST MONEY FIRST (MAR 2000)
- G.1.1 This contract currently is funded (or later will be funded) by two or more separate funding documents. The funding represents (or later will represent) appropriations made available for obligation in more than one fiscal year.
- G.1.2 In order for disbursements under the contract to be paid appropriately, the following requirements apply to the paying office:
- G.1.3 The PAYING OFFICE shall determine the total amount requested on each invoice or payment voucher received against the contract. Each payment shall be made against the oldest funding line(s) in the contract for which funds remain available. if the oldest fiscal year represented by two or more accounting lines still contain funds, payment shall be made equally against all accounting lines representing the oldest fiscal year until such lines are completely disbursed.
- G.1.3.1 Example: The contract includes one accounting line from fiscal year 2002 and two accounting lines from fiscal year 2003.

 Result: disbursements against new invoices are made ont he fiscal 2002 accounting line until it is completely disbursed, before any disbursements are made against the fiscal year 2003 accounting lines. Once disbursements start against the fiscal year 2003 lines, those payments will be split equally between the two available 2003 line.
- G.1.3.2 The PAYING OFFICE shall pay all funds from ACRN AA before disbursing from ACRN AB and so on.

*** END OF NARRATIVE G 001 ***

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SECTION H - SPECIAL CONTRACT REQUIREMENTS

	Regulatory Cite	Title	Date
H-1	252.204-7000	DISCLOSURE OF INFORMATION	DEC/1991
H-2	252.204-7002	PAYMENT FOR SUBLINE ITEMS NOT SEPARATELY PRICED	DEC/1991
H-3	252.225-7010	DUTY-FREE ENTRYADDITIONAL PROVISIONS	AUG/2000
H-4	252.227-7036	DECLARATION OF TECHNICAL DATA CONFORMITY	JAN/1997
H-5	252.227-7037	VALIDATION OF RESTRICTIVE MARKINGS ON TECHNICAL DATA	SEP/1999
H-6	252.235-7011	FINAL SCIENTIFIC OR TECHNICAL REPORT	SEP/1999
H-7	252.246-7001	WARRANTY OF DATA	DEC/1991
H-8	252.227-7039	PATENTS REPORTING OF SUBJECT INVENTIONS	APR/1990

The Contractor shall furnish the Contracting Officer the following:

- (a) Interim reports every twelve (12) months (or such longer period as may be specified by the Contracting Officer) from the date of the contract, listing subject inventions during that period and stating that all subject inventions have been disclosed or that there are no such inventions.
- (b) A final report, within three (3) months after completion of the contracted work, listing all subject inventions or stating that there were no such inventions.
- (c) Upon request, the filing date, serial number and title, a copy of the patent application and patent number, and issue data for any subject invention for which the Contractor has retained title.
- (d) Upon request, the Contractor shall furnish the Government an irrevocable power to inspect and make copies of the patent application file.

(End of clause)

H-9 52.204-4005 REQUIRED USE OF ELECTRONIC CONTRACTING (TACOM)

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- (a) All contract awards, modifications and delivery orders issued by TACOM will be issued electronically. The contractor has the option to receive these actions either via the Worldwide Web (WWW) or Electronic Data Interchange (EDI). Many provisions and clauses appear "by reference," meaning only clause titles and regulation site are listed; their full texts can be found at the website http://farsite.hill.af.mil/
- (b) In order to be eligible to receive an award under this solicitation, the successful offeror must be registered with the Department of Defense (DOD) Central Contractor Registration (CCR). The CCR registration process may be done electronically at the World Wide Web (WWW) site: http://www.ccr.gov/ . (In order to be registered to use EDI, you must use the long form for registration. Certification information, including information on the EDI 838 TPP, must be furnished to the Contracting Officer within 60 calendar days after contract award to complete networking requirements within the Government.)
- (c) Worldwide Web Distribution. The contractor will receive an electronic Notice of the Award, Modification, or Delivery Order via e-mail. If you choose the WWW option, you must download the file from the appropriate TACOM webpage:

Warren: http://contracting.tacom.army.mil/awards_official.htm Rock Island: http://aais.ria.army.mil/AAIS/AWDINFO/index.htm Picatinny: http://procnet.pica.army.mil/Contracts/Index.htm

Red River Army Depot: http://www.redriver.army.mil/contracting/Awards

Anniston Army Depot: http://www.anadprocnet.army.mil

- (d) Electronic Data Interchange. If you choose to receive contract awards, modifications and delivery orders through EDI, they will be delivered electronically via the Federal Acquisition Network (FACNET). Federal Standard Version 3050 of Standard X12 from the American National Standards Institute (ANSI) will be used as the format for these electronic transactions.
- (1) You must complete the EDI 838 Trading Partner Profile, and must agree (i) to subcontract with a DoD certified VAN or Value Added Service (VAS) provider, or (ii) to become DoD certified as a Value Added Network (VAN). The EDI 838 Training Partner Profile is contained in the basic CCR registration form and includes portions of the registration form which are titled "Optional".
- (2) You must select a VAN from the official DoD approved list. DoD Certified VANs are listed at http://www.acq.osd.mil/ec/ecip/index.htm . If your VAN is later removed from the official list, or if you voluntarily drop your initially selected VAN, then you must switch to a VAN that remains on the official DoD approved list. You must maintain an active account on a DoD approved VAN for the entire duration of the contract, beginning no later than the 60th day after award.

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CONTINUATION SHEET	PIIN/SIIN DAAE07-03-C-L104	MOD/AMD	

Name of Offeror or Contractor: ACCURATE AUTOMATION CORPORATION

- (e) Unless otherwise specified elsewhere in the contract, all data items you are required to provide under this contract must be submitted electronically. Acceptable formats include:
 - (1) Microsoft* 97 Office Products (TACOM can currently read OFFICE 97* and lower.): Word, Excel, Powerpoint, or Access
 - (2) 100 OR 250 MEGABYTE ZIP * -DISK, 3 1/2 INCH DISK, OR 650 MEGABYTE CD ROM
 - (3) E-MAIL (Maximum size of each e-mail message is be three and one-half (3.5) megabytes).
- (4) Other electronic formats. Before submitting your data in any other electronic format, please e-mail the buyer identified on the face of the contract, with e-mail copy-furnished to amsta-idq@tacom.army.mil, to obtain a decision as to the format's acceptability. This e-mail must be received by the buyer not later than ten calendar days before the required data submission date.

NOTE: The above formats may be submitted in compressed form using self-extracting files.

- (f) Additional information can be obtained by sending a message to: acqcenweb@tacom.army.mil or by calling (586) 574-7059.
- H-10 52.246-4026 LOCAL ADDRESSES FOR DD FORM 250 MAR/2002 (TACOM)
- (a) The contractor must provide a copy of each Material Inspection and Receiving Report (DD 250) pertaining to this contract, to the addresses given below, using either of the following methods:
 - (1) Our first preference is for you to use electronic mail (e-mail), using the following e-mail address:

DD250@tacom.army.mil

- (2) Our second preference is for you to use data facsimile (datafax) transmission, using this fax number:
 - (586) 574-7552 and use "DD250 mailbox" in the "to:" block of your fax cover or header sheet.

In either method, do not mix DD250s from more than one contract in a single transmission. That is, you may submit multiple DD250s in a single transmission, but they must all be against the same contract.

- (b) These copies meet the requirements for the Purchasing Office copy and the Army Inventory Control Manager copy listed in tables 1 and 2 of DFARS Appendix F.
 - (c) The DD250 form may be found, in three different formats, on the World Wide Web at http://web1.whs.osd.mil/icdhome/DD-0999.htm

[End of Clause]

- H-10 Exercise of Option(s) (CLIN 0003)
- H-10.1 The Government shall have the unilateral right to exercise a first option for the effort described in C.4, at a cost not to exceed that amount identified in CLIN 0003AA in Section B of this contract. The Government may exercise this option at any time after contract award but in no event later than 12 months after contract award. If exercised by the Contracting Officer, the first option effort will be awarded on a firm fixed price basis.
- H-10.2 The Government shall have the unilateral right to exercise a second option for the effort described in C.5, at a cost not to exceed that amount identified in CLIN 0003AB in Section B of this contract. The Government may exercise this option at any time after contract award, but in no event later than the later of (i) 24 months after award of the contract, or (ii) 12 months after exercise of the first option (H-10.1 above) or the Government may exercise this option without issuing Option 1 in H-10.1. If exercised by the Contracting Officer, the second option will be awarded on a firm fixed price basis.
- H-10-3 The Government shall have the unilateral right to exercise a third option for the effort described in C.6, at a cost not to exceed that identified in CLIN 0003AC in Section B of this contract. The Government may exercise this option at any time after contract award but in no event later than the later of (i) 24 months after contract award, or (ii) 12 months after exercise of either the first or second option (H-10.1 & H-10.2 above). If exercised by the Contracting Officer, the third option effort will be awarded on a firm fixed price basis.
- H-10.4 The Government shall have the unilateral right to exercise a fourth option for the effort described in C.7, at a cost not to exceed that identified in CLIN 0003AD in Section B of this contract. The Government may exercise this option at any time after contract award but in no event later than the later of (i) 24 months after contract award, or (ii) 12 months after exercise of a preceding second

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option (H-10.1, H-10.2 or H-10.3 above). If exercised by the Contracting Officer, the forth option effort will be awarded on a firm fixed price basis.

H-10.5 The Government shall have the unilateral right to exercise a fifth option for the effort described in C.8, at a cost not to exceed that identified in CLIN 0003AE in Section B of this contract. The Government may exercise this option at any time after contract award but in no event later than the later of (i) 24 months after contract award, or (ii) 12 months after exercise of preceding option (H-10.1, H-10.2, H-10.3 or H-10.4 above). If exercised by the Contracting Officer, the fifth option effort will be awarded on a firm fixed price basis.

H-10.6 The Government shall have the unilateral right to exercise a sixth option for the effort described in C.9, at a cost not to exceed that identified in CLIN 0003AF in Section B of this contract. The Government may exercise this option at any time after contract award but in no event later than the later of (i) 24 months after contract award, or (ii) 12 months after exercise of a preceding option (H-10.1, H-10.2, H-10.3, H-10.4 or H-10.5 above). If exercised by the Contracting Officer, the sixth option effort will be awarded on a firm fixed price basis.

H-10.7 The Government shall have the unilateral right to exercise a seventh option for the effort described in C.10, at a cost not to exceed that identified in CLIN 0003AG in Section B of this contract. The Government may exercise this option at any time after contract award but in no event later than the later of (i) 24 months after contract award, or (ii) 12 months after exercise of a preceding option (H-10.1, H-10.2, H-10.3, H-10.4, H-10.5, or H-10.6 above). If exercised by the Contracting Officer, the seventh option effort will be awarded on a firm fixed price basis.

H-10.8 The Government shall have the unilateral right to exercise an eighth option for the effort described in C.11, at a cost not to exceed that identified in CLIN 0003AH in Section B of this contract. The Government may exercise this option at any time after contract award but in no event later than the later of (i) 24 months after contract award, or (ii) 12 months after exercise of a preceding option (H-10.1, H-10.2, H-10.3, H-10.4, H-10.5, H-10.6 and H-10.7 above). If exercised by the Contracting Officer, the eighth option effort will be awarded on a firm fixed price basis.

H-10.9 The Government shall have the unilateral right to exercise a ninth option for the effort described in C.12, at a cost not to exceed that identified in CLIN 0003AJ in Section B of this contract. The Government may exercise this option at any time after contract award but in no event later than the later of (i) 24 months after contract award, or (ii) 12 months after exercise of a preceding option (H-10.1, H-10.2, H-10.3, H-10.4, H-10.5, H-10.6, H-10.7 or H-10.8 above). If exercised by the Contracting Officer, the ninth option effort will be awarded on a firm fixed price basis.

*** END OF NARRATIVE H 001 ***

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Name of Offeror or Contractor: ACCURATE AUTOMATION CORPORATION

SECTION I - CONTRACT CLAUSES

	Regulatory Cite	Title	Date
I-1	52.202-1	DEFINITIONS	DEC/2001
I-2	52.203-3	GRATUITIES	APR/1984
I-3	52.203-5	COVENANT AGAINST CONTINGENT FEES	APR/1984
I-4	52.203-6	RESTRICTIONS ON SUBCONTRACTOR SALES TO THE GOVERNMENT	JUL/1995
I-5	52.203-7	ANTI-KICKBACK PROCEDURES	JUL/1995
I-6	52.203-8	CANCELLATION, RESCISSION AND RECOVERY OF FUNDS FOR ILLEGAL OR IMPROPER ACTIVITY	JAN/1997
I-7	52.203-10	PRICE OR FEE ADJUSTMENT FOR ILLEGAL OR IMPROPER ACTIVITY	JAN/1997
I-8	52.203-12	LIMITATION ON PAYMENTS TO INFLUENCE CERTAIN FEDERAL TRANSACTIONS	JUN/2003
I-9	52.204-4	PRINTING/COPYING DOUBLE-SIDED ON RECYCLED PAPER	AUG/2000
I-10	52.209-6	PROTECTING THE GOVERNMENT'S INTEREST WHEN SUBCONTRACTING WITH CONTRACTORS DEBARRED, SUSPENDED, OR PROPOSED FOR DEBARMENT	JUL/1995
I-11	52.211-5	MATERIAL REQUIREMENTS	AUG/2000
I-12	52.211-15	DEFENSE PRIORITY AND ALLOCATION REQUIREMENTS	SEP/1990
I-13	52.215-2	AUDIT AND RECORDS - NEGOTIATIONS	JUN/1999
I-14	52.215-8	ORDER OF PRECEDENCEUNIFORM CONTRACT FORMAT	OCT/1997
I-15	52.215-11	PRICE REDUCTION FOR DEFECTIVE COST OR PRICING DATAMODIFICATIONS	OCT/1997
I-16	52.215-13	SUBCONTRACTOR COST OR PRICING DATA MODIFICATIONS	OCT/1997
I-17	52.215-17	WAIVER OF FACILITIES CAPITAL COST OF MONEY	OCT/1997
I-18	52.219-6	NOTICE OF TOTAL SMALL BUSINESS SET-ASIDE	JUN/2003
I-19	52.219-14	LIMITATIONS ON SUBCONTRACTING	DEC/1996
I-20	52.222-1	NOTICE TO THE GOVERNMENT OF LABOR DISPUTES	FEB/1997
I-21	52.222-4	CONTRACT WORK HOURS AND SAFETY STANDARDS ACTOVERTIME COMPENSATION	SEP/2000
I-22	52.222-20	WALSH-HEALEY PUBLIC CONTRACTS ACT	DEC/1996
I-23	52.222-21	PROHIBITION OF SEGREGATED FACILITIES	FEB/1999
I-24	52.222-26	EQUAL OPPORTUNITY	APR/2002
I-25	52.222-35	AFFIRMATIVE ACTION FOR DISABLED VETERANS AND VETERANS OF THE VIETNAM ERA	DEC/2001
I-26	52.222-36	AFFIRMATIVE ACTION FOR WORKERS WITH DISABILITIES	JUN/1998
I-27	52.222-37	EMPLOYMENT REPORTS ON SPECIAL DISABLED VETERANS, VETERANS OF THE VIETNAM ERA, AND OTHER ELIGIBLE VETERANS	DEC/2001
I-28	52.223-6	DRUG FREE WORKPLACE	MAY/2001
I-29	52.225-8	DUTY-FREE ENTRY	FEB/2000
I-30	52.225-13	RESTRICTIONS ON CERTAIN FOREIGN PURCHASES	JUN/2003
I-31	52.227-2	NOTICE AND ASSISTANCE REGARDING PATENT AND COPYRIGHT INFRINGEMENT	AUG/1996
I-32	52.229-4	FEDERAL, STATE, AND LOCAL TAXES (NONCOMPETITIVE CONTRACT)	APR/2003
I-33	52.229-5	TAXESCONTRACTS PERFORMED IN U.S. POSSESSIONS OR PUERTO RICO	APR/1984
I-34	52.232-2	PAYMENTS UNDER FIXED-PRICE RESEARCH AND DEVELOPMENT CONTRACTS	APR/1984
I-35	52.232-8	DISCOUNTS FOR PROMPT PAYMENT	FEB/2002
I-36	52.232-9	LIMITATION ON WITHHOLDING OF PAYMENTS	APR/1984
I-37	52.232-11	EXTRAS	APR/1984
I-38	52.232-17	INTEREST	JUN/1996
I-39	52.232-23	ASSIGNMENT OF CLAIMS	JAN/1986
I-40	52.232-25	PROMPT PAYMENT	FEB/2002
I-41	52.232-33	PAYMENT BY ELECTRONIC FUNDS TRANSFERCENTRAL CONTRACTOR REGISTRATION	OCT/2003
I-42	52.233-1	DISPUTES	JUL/2002
I-43	52.233-3	PROTEST AFTER AWARD	AUG/1996
I-44	52.242-13	BANKRUPTCY	JUL/1995
I-45	52.243-1	CHANGESFIXED-PRICE	AUG/1987
I-46	52.243-7	NOTIFICATION OF CHANGES	APR/1984
I-47	52.244-5	COMPETITION IN SUBCONTRACTING	DEC/1996
I-48	52.249-2	TERMINATION FOR CONVENIENCE OF THE GOVERNMENT (FIXED-PRICE)	SEP/1996
I-49	52.249-9	DEFAULT (FIXED-PRICE RESEARCH AND DEVELOPMENT)	APR/1984
I-50	52.249-13	FAILURE TO PERFORM	APR/1984
I-51	52.249-14	EXCUSABLE DELAYS	APR/1984
I-52	52.253-1	COMPUTER GENERATED FORMS	JAN/1991
I-53	252.203-7001	PROHIBITION ON PERSONS CONVICTED OF FRAUD OR OTHER DEFENSE CONTRACT-RELATED FELONIES	MAR/1999
I-54	252.204-7003	CONTROL OF GOVERNMENT PERSONNEL WORK PRODUCT	APR/1992
I-55	252.209-7004	SUBCONTRACTING WITH FIRMS THAT ARE OWNED OR CONTROLLED BY THE	MAR/1998
		GOVERNMENT OF A TERRORIST COUNTRY per DoD interim rule, Federal Register 27 Mar 98	

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	Regulatory Cite	Title	Date
I-56	252.215-7000	PRICING ADJUSTMENTS	DEC/1991
I-57	252.225-7012	PREFERENCE FOR CERTAIN DOMESTIC COMMODITIES	FEB/2003
I-58	252.225-7017	PROHIBITION ON AWARD TO COMPANIES OWNED BY THE PEOPLE'S REPUBLIC OF	FEB/2000
		CHINA	
I-59	252.225-7031	SECONDARY ARAB BOYCOTT OF ISRAEL	APR/2003
I-60	252.226-7001	UTILIZATION OF INDIAN ORGANIZATIONS AND INDIAN-OWNED ECONOMIC	SEP/2001
		ENTERPRISES	
I-61	252.227-7013	RIGHTS IN TECHNICAL DATANONCOMMERCIAL ITEMS	NOV/1995
I-62	252.227-7016	RIGHTS IN BID OR PROPOSAL INFORMATION	JUN/1995
I-63	252.227-7017	IDENTIFICATION AND ASSERTION OF USE, RELEASE, OR DISCLOSURE	JUN/1995
		RESTRICTIONS	
I-64	252.227-7019	VALIDATION OF ASSERTED RESTRICTIONSCOMPUTER SOFTWARE	JUN/1995
I-65	252.227-7030	TECHNICAL DATAWITHHOLDING OF PAYMENT	MAR/2000
I-66	252.232-7006	REDUCTION OR SUSPENSION OF CONTRACT PAYMENTS UPON FINDING OF FRAUD	AUG/1992
I-67	252.242-7000	POSTAWARD CONFERENCE	DEC/1991
I-68	252.243-7001	PRICING OF CONTRACT MODIFICATIONS	DEC/1991
I-69	252.244-7000	SUBCONTRACTS FOR COMMERCIAL ITEMS AND COMMERCIAL COMPONENTS (DoD	MAR/2000
		CONTRACTS)	
T-70	52.223-11	OZONE-DEPLETING SUBSTANCES	MAY/2001

- (a) Definition. Ozone-depleting substance, as used in this clause, means any substance the Evironnmental Protection Agency designates in 40 CFR part 82 as--
 - (1) Class I, including, but not limited to, chlorofluorocarbons, halons, carbon tetrachloride, and methyl chloroform; or
 - (2) Class II, including but not limited to, hydrochlorofluorocarbons.
- (b) The Contractor shall label products which contain or are manufactured with ozone-depleting substances in the manner and to the extent required by 42 U.S.C. 7671j(b), (c), and (d) and 40 CFR Part 82, Subpart E, as follows:

WARNING: Contains (or manufactured with, if applicable) _____ * _____, a substance(s) which harm(s) public health and environment by destroying ozone in the upper atmosphere.

*The Contractor shall insert the name of the substance(s).

[End of Clause]

I-71 52.252-6 AUTHORIZED DEVIATIONS IN CLAUSES

APR/1984

- (a) The use in this solicitation or contract of any Federal Acquisition Regulation (48 CFR Chapter 1) clause with an authorized deviation is indicated by the addition of (DEVIATION) after the date of the clause.
- (b) The use in this solicitation or contract of any DoD FAR Supplement (DFARS) (48 CFR 2) clause with an authorized deviation is indicated by the addition of (DEVIATION) after the name of the regulation.

[End of Clause]

I-72 252.204-7004 REQUIRED CENTRAL CONTRACTOR REGISTRATION

NOV/2001

- (a) Definitions. As used in this clause--
- (1) <u>Central Contractor Registration (CCR) database</u> means the primary DoD repository for contractor information required for the conduct of business with DoD.
- (2) <u>Data Universal Numbering System (DUNS) number</u> means the 9-digit number assigned by Dun and Bradstreet Information Services to identify unique business entities.
- (3) <u>Data Universal Numbering System +4 (DUNS+4) number</u> means the DUNS number assigned by Dun and Bradstreet plus a 4-digit suffix that may be assigned by a parent (controlling) business concern. This 4-digit suffix may be assigned at the discretion of the parent business concern for such purposes as identifying subunits or affiliates of the parent business concern.

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(4) <u>Registered in the CCR database</u> means that all mandatory information, including the DUNS number or the DUNS+4 number, if applicable, and the corresponding Commercial and Government Entity (CAGE) code, is in the CCR database; the DUNS number and the CAGE code have been validated; and all edits have been successfully completed.

(b)

- (1) By submission of an offer, the offeror acknowledges the requirement that a prospective awardee must be registered in the CCR database prior to award, during performance, and through final payment of any contract resulting from this solicitation, except for awards to foreign vendors for work to be performed outside the United States.
- (2) The offeror shall provide its DUNS or, if applicable, its DUNS+4 number with its offer, which will be used by the Contracting Officer to verify that the offeror is registered in the CCR database.
 - (3) Lack of registration in the CCR database will make an offeror ineligible for award.
- (4) DoD has established a goal of registering an applicant in the CCR database within 48 hours after receipt of a complete and accurate application via the Internet. However, registration of an applicant submitting an application through a method other than the Internet may take up to 30 days. Therefore, offerors that are not registered should consider applying for registration immediately upon receipt of this solicitation.
- (c) The Contractor is responsible for the accuracy and completeness of the data within the CCR, and for any liability resulting from the Government's reliance on inaccurate or incomplete data. To remain registered in the CCR database after the initial registration, the Contractor is required to confirm on an annual basis that its information in the CCR database is accurate and complete.
- (d) Offerors and contractors may obtain information on registration and annual confirmation requirements by calling 1-888-227-2423, or via the Internet at http://www.ccr.gov.

[End of Clause]

- I-73 52.204-4009 MANDATORY USE OF CONTRACTOR TO GOVERNMENT ELECTRONIC COMMUNICATION JUN/1999 (TACOM)
- (a) All references in the contract to the submission of written documentation shall mean electronic submission. All electronic submissions shall be in the formats and media described in the "Electronic Quotations/Offers/Bids Required in Response to this Request for Quotations/Proposals/Bids" clause elsewhere in this document. (See Section K for commercial acquisitions, Section L for RFPs, and Section I for RFQs.)
- (b) This shall include all written unclassified communications between the Government and the Contractor except contract awards and contract modifications which shall be posted on the internet. Return receipt shall be used if a commercial application is available. Classified information shall be handled in full accordance with the appropriate security requirements.
- (c) In order to be contractually binding, all Government communications requiring a Contracting Officer signature must be sent from the Contracting Officer's e-mail address. The Contractor shall designate the personnel with signature authority who can contractually bind the contractor. All binding contractor communication shall be sent from this contractor e-mail address(es).
- (d) Upon award, the Contractor shall provide the Contracting Officer with a list of e-mail addresses for all administrative and technical personnel assigned to this contract.
- (e) Unless exempted by the Procuring Contracting Officer in writing, all unclassified written communication after contract award shall be transmitted electronically.

[End of Clause]

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CONTINUATION SHEET	PHN/SHN DAAE07-03-C-L104	MOD/AMD				
Name of Offeror or Contractor: ACCURATE AUTOMATION CORPORATION						
SECTION J - LIST OF ATTACHMENTS						
List of			Number			
<u>Addenda</u>	Title	Date	of Pages Transmitted By			

03-DEC-2003 004

Exhibit A

EXHIBIT A

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CONTRACT DATA REQUIREMENT LIST

Form Approval OMB No. 0704-0188 Public reporting burden for this collection of information is estimated to average 440 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503. Please DO NOT RETURN your form to either these addresses. Send completed form to the Government Issuing Contracting Officer for the Contract/PR No. listed in Block E.

A.	CONTRACT LINE ITEM NO:	
В.	EXHIBIT:	A
C.	CATEGORY:	
D.	SYSTEM/ITEM:	
Ε.	CONTRACT/PR NO:	DAAE07-03-C-L104
F.	CONTRACTOR:	Accurate Automation Corporation
1.	DATA ITEM NO:	A001
2.	TITLE OF DATA ITEM:	Contractor's Progress, Status, and Management Report
3.	SUBTITLE:	Progress Report
4.	AUTHORITY:	DI-MGMT-80227
5.	CONTRACT REFERENCE:	Section C
6.	REQUIRING OFFICE:	AMSTA-TR-R/MS-263
7.	DD250 REQ:	DD
8.	APP CODE:	
9.	DIST. STATEMENT REQUIRED:	
10.	FREQUENCY:	See Block 16
11.	AS OF DATE:	See Block 16
12.	DATE OF FIRST SUB:	See Block 16
13.	DATE OF SUBS. SUB:	See Block 16
14.	DISTRIBUTION	A. ADDRESSEES
		COR: Andrew Clements, E-mail: clementa@tacom.army.mil
		PCO's Office: Neil Williston, Contract Specialist, E-mail: willistn@tacom.army.mil
		ACO: Dan Rahm, E-mail: Dan.Rahm@dcma.mil
		B. COPIES: DRAFT 1 FINAL 1

15. TOTAL..... 3 *

- * In distributing the electronic report according to the schedule in Block 16 below, the Contractor shall deliver one (1) copy to each Government addressees: Andrew Clements, Neil Williston and Dan Rahm at the above mentioned addresses.

 16. REMARKS:
- a. Basic Period: The Contractor shall deliver a copy of the progress report within one (1) month after the contract award to each of the parties identified in Block 14A.
- b. Instructions for Progress Reports: Complete the reports in accordance with (IAW) Data Item Description (DID) DI-MGMT-80227, "Contractor's Progress, Status, and Management Report." The COR is responsible for accepting or rejecting the "Contractor's Progress, Status, and Management Reports." See DID DI-MGMT-80227, at the internet address below, for instructions on completing the required report.

 $\verb|http://astimage.daps.dla.mil/docimages/0001\48\17\DI80227.PD8|$

- c. Prepare the reports in the Contractor's format. Submit the reports using any of the following electronic formats:
- (1) Files readable using these Microsoft* 97 Office Products (TACOM can currently read OFFICE 97* and lower): Word, Excel, PowerPoint, or Access. Spreadsheets must be sent in a file format that includes all formulae, macro and format information. Print image is not acceptable. Executable files, other than self-extracting compressed files, are unacceptable. Note: This format is preferred.
 - (2) Files in Adobe PDF (Portable Document Format). Scanners should be set to 200 dots per inch.
- (3) Files in HTML (Hypertext Markup Language). HTML documents must not contain active links to live Internet sites or pages. All linked information must be contained within your electronic report, and be accessible offline.
- (4) Other electronic formats. Before preparing your report in any other electronic format, please e-mail the COR, with an e-mail copy-furnished to amsta-idq@tacom.army.mil, to obtain a decision as to the format's acceptability. This e-mail must be received by

E-mail: clementa@tacom.armv.mil

E-mail: willistn@tacom.army.mil

E-mail: Dan.Rahm@dcma.mil

the COR not later than ten calendar days before the draft Scientific and Technical Report's due date. All alternate methods must be at no cost to the Government.

(a) The above formats may be submitted in compressed form using self-extracting files.

- (b) Files may be read-only, password protected. However, text and graphics must be accessible by the COR for use in creating briefings to report on this program.
- d. Acceptable media: The Contractor shall submit reports via e-mail and CD-ROM. The email version of the report shall contain only contractual, schedule, and financial data-not technical data. The complete report, including technical data shall be submitted via CD-ROM. Other acceptable media include 100 or 250 Megabyte Zip*-disk or 3 inch disk. Identify the software application and version used to create each file submitted.
- (1) E-MAIL. Maximum size of each e-mail message shall be three and one-half (3.5) megabytes. Any compressed files must be self-extracting, and you must provide appropriate instructions. You may use multiple e-mail messages if necessary, however, you must annotate the subject lines in this manner: "Message 1 of 3, 2 of 3, 3 of 3."
- (2) 100 or 250 MEGABYTE ZIP*-DISK, 3 INCH DISK, OR 650 MEGABYTE CD ROM via U.S. Mail or other carrier. The Contractor shall label all submitted disks with the Contract number, the Contractor's name and address, and a contact's phone number.
- * Registered Trademark

17. PRICE GROUP:

18. ESTIMATED TOTAL PRICE :

1. DATA ITEM NO. A002 TITLE OF DATA ITEM.....: Scientific and Technical Reports SUBTITLE: Basic Contract: Draft and Final Technical Reports 4. AUTHORITY: DI-MISC-80711A 5. CONTRACT REFERENCE.....: Section C 6. REQUIRING OFFICE AMSTA-TR-R/MS-263 7. DD250 REQ DD 8. APP CODE: 9. DIST. STATEMENT

10. Frequency.....: See Bloch 16

11. AS OF DATE

12. DATE OF FIRST SUB...... See Block 16 13. DATE OF SUBS. SUB..... See Block 16 14 DISTRIBUTION A ADDRESSEES

COR: Andrew Clements. PCO's Office: Neil Williston, ACO: Dan Rahm. ACO,

> B. COPIES: Draft 1 Final 1*

- * In distributing electronic copies of the final report according to the schedule in Block 16 below, the Contractor shall deliver one (1) copy to each of the Government addressees: Andrew Clements, Neil Williston, and Dan Rahm at the adresses listed above.
- 16. REMARKS:
- a. Basic Period: The Contractor shall deliver one (1) draft "Scientific and Technical Report," two (2) months after contract award. The draft report shall include a completed Standard Form (SF) 298 (Report Documentation Page) as the report's cover sheet. The COR shall review the draft report and return it to the Contractor within seven (7) days of receipt with comments. The Contractor must incorporate any recommendations or required clarifications arising from the COR's review of the draft and then submit one (1) final "Scientific and Technical Report" (with the completed SF 298) within fourteen (14) days after receipt of draft comments.
- b. Instructions for Technical Reports: Complete the reports IAW DID DI-MISC 80711A, "Scientific and Technical Reports." The COR is responsible for accepting or rejecting the draft and final reports. The Contracor shall be responsible for submitting the approved final report to the Defense Technical Information Center (DTIC), in Ft. Belvoir, VA. See the data item description (DI-MISC-80711A), at the internet address below, for instructions on completing the required report.

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 $\verb|http://astimage.daps.dla.mil/docimages/0002\27\88\80711A.PD4|$

You may download the SF 298 form, from the following internet address:

http://www.dtic.mil/dtic/forms/sf298template.doc

you may download basic instructions for completing the SF 298 form, from the following internet address:

http://www.dtic.mil/dtic/forms/SF298_MS67.doc

Here are some additional instructions for completing the SF 298 form, that apply when submitting reports under the SBIR Program:

For each unclassified report, the Contractor shall fill in Block 12a (Distribution/Availability Statement) of the SF 298 with the following statements:

Distribution authorized to U.S. Government Agencies only; contains proprietary information

Note: After reviewing the Contractor's entry in Block 12a, TACOM has final responsibility for assigning a distribution statement.

Block 13 The abstract of the SF 298 must identify the purpose of the work and briefly describe the work carried out, the finding or results, and the potential applications of the effort. Since the Department of Defense (DOD) will be publishing the bstract, it must not contain any proprietary or classified data.

Block 14 (Subject Terms) of the SF 298 must include the term "SBIR Report."

- c. Prepare the reports in the Contractor's format. Submit the reports using any of the following electronic formats:
- (1) Files readable using these Microsoft* 97 Office Products (TACOM can currently read OFFICE 97* and lower): Word, Excel, PowerPoint, or Access. Spreadsheets must be sent in a file format that includes all formulae, macro and format information. Print image is not acceptable. Executable files, other than self-extracting compressed files, are unacceptable. Note: This format is preferred.
 - (2) Files in Adobe PDF (Portable Document Format). Scanners should be set to 200 dots per inch.
- (3) Files in HTML (Hypertext Markup Language). HTML documents must not contain active links to live Internet sites or pages. All linked information must be contained within your electronic report, and be accessible offline.
- (4) Other electronic formats. Before preparing your report in any other electronic format, please e-mail the COR, with an e-mail copy-furnished to amsta-idq@tacom.army.mil, to obtain a decision as to the format's acceptability. This e-mail must be received by the COR not later than ten calendar days before the draft report's due date.

 All alternate methods must be a no cost to the Government.
- NOTES: (a) The above formats may be submitted in compressed form using self-extracting files.
- (b) Files may be read-only, password protected. However, text and graphics must be accessible by the COR for use in creating briefings to report on this program.
- d. Acceptable media: The Contractor shall submit reports via e-mail and CD-ROM. The email version of the report shall contain only contractual, schedule, and financial data-not technical data. The complete report, including technical data, shall be submitted via CD-ROM. Other acceptable media include 100 or 250 Megabyte Zip*-disk or 3 inch disk. Identify the software application and version used to create each file submitted.
- (1) E-MAIL. Maximum size of each e-mail message shall be three and one-half (3.5) megabytes. Any compressed files must be self-extracting, and you must provide appropriate instructions. You may use multiple e-mail messages if necessary, however, you must annotate the subject lines in this manner: "Message 1 of 3, 2 of 3, 3 of 3."
- (2) 100 or 250 MEGABYTE ZIP*-DISK, 3 INCH DISK, OR 650 MEGABYTE CD ROM via U.S. Mail or other carrier. The Contractor shall label all submitted disks with the Contract number, the Contractor's name and address, and a contact's phone number.
- * Registered Trademark
- 17. PRICE GROUP:
- 18 ESTIMATED TOTAL PRICE:

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 Exhibit A

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INSPECTION/ACCEPTANCE: The COR is responsible for reviewing and accepting or rejecting the contract deliverables.

DELIVERIES OR PERFORMANCE: All items called for in this contract shall be delivered FOB destination to:

U.S. Army Tank-automotive and Armament Command Shipping and Receiving Bldg. #203 ATTN: AMSTA-TR-R, MS 263, Andrew Clements/x45389 6501 East Eleven Mile Rd. Warren, MI 48397-5000